



THE ROYAL GOLD MEDAL, 1911.

Presentation to WILHELM DÖRPFELD, Ph.D., D.C.L., F.S.A., at a General Meeting of the Royal Institute of British Architects held Monday, 26th June 1911.

THE PRESIDENT having announced that the principal object of the meeting that evening was to present the Royal Gold Medal for the Promotion of Architecture to Dr. Wilhelm Dörpfeld, of the German Archaeological Institute at Athens, went on to express his great regret that Dr. Dörpfeld was suffering from illness and was unable to come to England to receive the Medal in person. The German Ambassador, however, had been good enough to ask Count William Bentinck, Attaché to the Embassy, to attend the meeting and receive the Medal for Dr. Dörpfeld. Before making the formal presentation, he would ask Professor Beresford Pite to deliver an address on the life and work of Dr. Dörpfeld. His works were already well known to members, but it would do them all good to have their memories refreshed concerning the great work which Dr. Dörpfeld had carried out in the interests of architecture and archaeology.

ADDRESS BY PROFESSOR BERESFORD PITE.

Wilhelm Dörpfeld, Architect, Doctor of Philosophy and of Laws, was born at Barmen on 26th December 1853; he was educated at the Gymnasium of Barmen and at the celebrated Technical High School at Berlin. At the age of twenty-four he was appointed architect to the German Institute of Archaeology at Athens, and thence to the excavations at Olympia undertaken by that Institute under the direction of Ernst Curtius; since then, for well nigh forty years, his life-work has concentrated itself upon Grecian life and architecture. His enthusiastic zeal, strengthened by a growing scholarship, has developed and advanced the scientific excavation of ancient sites; and the elucidation by classification of the constantly accumulating discoveries has made him not only a great discoverer but an inspiring teacher; while his boldness and certainty of vision, in recreating the hitherto almost unrevealed world of pre-Hellenic thought expressed in building facts, constitutes a forcible claim for his recognition as a great imaginative constructor. For this work as a discoverer, as an elucidator, and as a reconstructor of the foundations upon which the glories of Greek architecture were achieved, British architects to-day offer again their recognition and applause to their German confrère, the great successor of Schliemann, upon whom the Royal Gold Medal for architecture was conferred twenty-six years ago.

Dr. Dörpfeld's work may be broadly described as that of manifesting to the world for the first time the true import of the almost magical discoveries of his friend and master, that true

amateur of Greek archaeology, Heinrich Schliemann. The dawning certainty that a Mycenaean architecture underlay, as a foundation, the development of that ultimate architecture of Greece, which for a whole century Europe has accepted as the acme of intellectual expression in building, is due more to Dörpfeld than to any other man. The marvels of Knossos so learnedly discerned, and then discovered, by Sir Arthur Evans—whom we pause to congratulate—with their relation to a still older Minoan age, fall naturally into place in the progress of the intensive revelation of the core of Levantine culture, after the establishment by Dörpfeld of the relation of the art of the mainland at Mycenae to that which went before and which followed after.

Untiring patience in research, insight into purposes and conditions, and the architectural instinct of a scholarly imagination, combine in Dörpfeld's work to fascinate the modern practical architect. We may wonder, and perchance tremble at the prospect, even in the dimmest future, of the unravelling, by such another investigator, of the motives and simulations involved in the process which we call design. In deprecation of the searchlight of the future we to-night offer appreciation to the revealer of the long-past. The living to-day has seen the dead yesterday arise, and cannot but marvel and be instructed.

Dörpfeld's work began, as we have said, at Olympia under Curtius, and was afterwards continued as assistant to Schliemann at Tiryns and Troy. After Schliemann's death in 1890 he was in full charge of the excavations, and there he watched for, discovered, and elucidated the evidences of that pre-literary life of Greece to which Homer looked back and which he has pictured in his illuminating history. In 1887 Dörpfeld was appointed Secretary of the German Archaeological Institute at Athens, and later on its Director, and from his home and work in that city he has shed light and stimulating exposition upon the problems of its Acropolis, more modern by a millennium than the original Troy. Of late by the direction of the German Emperor he has been placed in charge of the excavations at Garitza in Corfu.

The architectural drawings bearing the name of Wilhelm Dörpfeld, in the great and fascinating volumes recording the excavations and discoveries at Olympia, are evidence of his possession of that clearness of method and completely scientific draughtsmanship which we associate with his friend and colleague Francis Cranmer Penrose. The simple sections elucidating the strata of buried cities upon the site of Troy are also models of directly explanatory diagrams. The fruitful effects of the excavations and discoveries at Olympia, at Tiryns, and at Troy upon our knowledge of the pre-Homeric world, and consequently upon the whole setting of early Greek history, might be dwelt upon, but their general aspect is not the especial ground of the bestowal of the Royal Gold Medal for Architecture. We must pass from the general view with the reflection that the critic of literary history most to be respected and feared is he who wields not the pen of scholarship but the pick of exploration:

"When time is old, and hath forgot itself,
When water drops have worn the stones of Troy,
And blind oblivion swallowed cities up,
And mighty States characterless are grated
To dusty nothing."

Among the suggestive architectural results that have followed from Dörpfeld's discoveries and insight may be instanced the recognition, in the recovered complete plan of the Mycenaean Palace at Tiryns, of the Megaron or Men's Hall with its portico in antis as the original type of the cella of the Grecian temple, which ever afterwards maintained its sacro-sanctity of plan, also that the propylea of the house went before that of the Acropolis. Dörpfeld saw that the foundation walls of the temples built of rubble were, on account of their breadth, a manifest preparation for a superstructure of weak unburnt brick; these cella walls were protected

of necessity by a verandah or peristyle; that the stone bases of the columns were so spaced that timber architraves must have bridged them; that terra-cotta tiles covered them; that the bases of the soft brick walls were protected vertically against the rain splash for a short space with stone plinths, a purpose and meaning of which the plinths of the modern architect are entirely deprived though their presence is dimly and may be sub-consciously known to be appropriate; and that the timber framings employed to strengthen the angles of such walls where the ceiling beams concentrated weight at the angles as well as at the jambs of the door, are the forerunners of the decorative stone anta pilasters and architraves. It is universally recognised that what Schliemann, with an almost miraculous instinct, lighted upon of ancient Troy, Dörpfeld by deliberate scholarship has elucidated amid the upheavals of the first excavations. He has recognised in all nine strata, and in the mound of Hissarlik in Asia defined in the sixth stratum a city similar in constructional epoch and style to those of Mycenae and Tiryns in Europe at their acme. No certainty in these important eras of Trojan building was possible until Dörpfeld's genius systematised the relations of the foundations and remains, and he has had his reward in revealing the Mycenaean architecture of the pre-Homeric age. His great book on this site is a monument of clearness, and its strength has not yet been weakened by any serious criticism.

Dörpfeld has been for many years the head of the German Archaeological Institute at Athens, the recognised *doyen* of her five foreign schools of archaeology, and an unrivalled lecturer and exponent of Athenian topography. To say that he is the greatest living authority upon all that concerns the Acropolis is to include a wide ground of reputation, for Athens has become again in our day a centre of learning; the ancient home of art and letters has attracted to herself from the New as well as from the Old World brilliant and ardent scholars in both their youth and prime. To those near, as well as to us who are farther off, the hidden mysteries of the Acropolis rock have become still more vital by the investigations and suggestive teaching of Dörpfeld. The Erechtheum, as always, is a problem not yet solved, but Dörpfeld's pregnant suggestion that the Porch of the Maidens and the Northern Portico may be the designed centres of incomplete elevations is provokingly just, and architecturally spontaneous; and when he indicates how the Greek architects were attended by such hindrances from political and civic troubles as have of late even with us provoked Parliamentary interference, he touches a note which proves him to be not only an archaeologist but a seer. Dörpfeld's courageous opinion, in spite of the obstructive presence of those six lovely maidens, that the ancient Athena Temple with its Periclean Treasury was not removed but maintained after the Persian wars, alongside the first Parthenon, if not also of the second, is another vivid instance of the inextinguishable interest of the aspect of the Acropolis at its splendid acme.

The help of such a cicerone as this, fully elaborating technical arguments with a patient enthusiasm and quiet humour, has been a privilege of which through his generosity many English students have tasted freely, and for which we now make acknowledgment. Dörpfeld's Athenian work has included the proposition, which Penrose's excavations afterwards justified, that the temple of Jupiter Olympius was octastyle, and had a large practical development in excavations on an extensive scale between the N.W. foot of the Acropolis and the Pnyx, tracing the ancient water supply and laying bare a thickly built-over quarter of the city. His remarkable work on the Greek Theatre should be mentioned and his interesting discovery that the original stage was on the ground level.

When Penrose, already venerable, undertook the first directorship of the British School at Athens, Dörpfeld afforded him unwearied assistance and support, and this kindly attitude has been maintained with all the subsequent Directors of our School.

Upon the Roll of those honoured by the Royal Gold Medal is found first in 1848 the great name of Cockerell, great as architect, explorer, and archaeologist, followed by Canina in 1849 of Roman fame, Donaldson in 1851, Hittorf of Sicilian fame in 1855, Pennethorne alike architect and Grecian archaeologist in 1865, Texier the Byzantine companion of our late colleague Pullan in 1867, Layard of Nineveh in 1868, Lepsius for Egyptian research in the following year, and the Marquis de Vogüé, great for his stimulating Syrian work in 1879, Penrose himself in 1883, Dörpfeld's companion and leader Schliemann in 1889, Lanciani of Rome in 1900, Choisy in 1904, and Evans in 1909—all archaeologists great in word and deed, to whom, by favour of His Most Gracious Majesty King George V., the Patron of this Royal Institute of British Architects, is added to-day the name of Wilhelm Dörpfeld, with the sincere gratitude of his English confrères for the architectural stimulus that his discoveries have afforded and for the brilliant expositions by which his genius has made the hidden embodiments of ancient intellect retell the story of their birth for our instruction.

THE PRESIDENT said they were all very grateful to Professor Pite for the able way in which he had put the great qualifications of Dr. Dörpfeld before the meeting. Before proceeding further he would ask the Secretary to read a letter which had been received from Dr. Dörpfeld.

The Secretary read the letter, as follows :—

Uhlandstr. 137, Wilmerdorf, Berlin.

DEAR SIR,—I very much regret that yesterday, in consequence of another attack of the complaint from which I suffered last winter, I was obliged to telegraph to you that I should not be able to come to London to receive the Gold Medal in person. I had made all my preparations to start for England to-morrow, but now, by my doctor's orders, I am compelled to go to Carlsbad immediately, and so must unfortunately give up my proposed journey to England.

I must ask you to convey to the Royal Institute of British Architects and its President my very sincere regret that I cannot be in London on the 26th to receive the Gold Medal personally, and at the same time to express my heartiest thanks to the Institute for the very high honour they are doing me by bestowing this Medal upon me.

My one aim and object all the time that I have worked in Greece—now some thirty-four years—has been to emulate the late F. C. Penrose, and to further the interests of Greek architecture, as he did. It was always a very great pleasure to me, at the time when he was Director of the British School at Athens, to work together with this Nestor of Greek architects at the buildings of Athens; and, as I am sure you will understand, it is the greatest pleasure to me now to receive the same Gold Medal that was presented to Penrose in recognition of his important life's work.

The distinction conferred upon me will be an incentive to me for the rest of my life to carry on Penrose's principles. I shall be happy indeed if the condition of my health will allow me to work for some time longer at the investigation of Greek architecture and its history.

I propose to present a work on the original plan of the Erechtheum to the Royal Institute of British Architects in which F. C. Penrose was formerly greatly interested.

With renewed thanks and deepest gratitude,

Yours very faithfully,

WILHELM DÖRPFELD.

THE PRESIDENT, addressing Count William Bentinck: In asking you to convey this Medal which we are privileged to present to Dr. Wilhelm Dörpfeld, I ask you to be good enough to explain to him the circumstance, known to most, that this Medal is presented by his Majesty the King, and not by this Institute. We simply recommend the person as recipient, and are merely the agents through whom the Medal is presented. We all feel that our choice on the present occasion could not have fallen upon one more worthy of the distinction than Dr. Wilhelm Dörpfeld. In handing you the Medal, Count William Bentinck, I ask you to express to Dr. Dörpfeld our sincere sorrow that he is not able to be present, and the hope that he will shortly recover his strength.

COUNT WILLIAM BENTINCK: Mr. President, although we all regret that Dr. Dörpfeld's illness prevents him receiving this high distinction personally, I can assure you it will be a great pleasure to his Excellency the German Ambassador to convey this distinction which his Majesty King George V. has been gracious enough to present to Dr. Dörpfeld.

THE INTERLEAVED COPY OF WREN'S "*PARENTALIA*," WITH MANUSCRIPT INSERTIONS.

By LAWRENCE WEAVER, F.S.A. [*Hon.A.*].

Read before the Royal Institute of British Architects, Monday, 26th June 1911.

THE book I have the honour to present to the Institute this evening on behalf of a body of subscribers justly deserves the epithet "unique." Associated as it is with the man who made the greatest mark not only on London's buildings but on the larger field of English architecture, I trust that the following particulars as to its contents will be of interest.

Let me say at once that I can bring before you no novel facts about Sir Christopher Wren's position in history either as to his art or his life. I may even be accused, and with justice, of reciting facts which I have already put on record, for I communicated Papers on the subject to the Society of Antiquaries, to the *Architectural Review*, and to *Country Life*, before it seemed possible that I should ever speak of it to the members of this Institute as owners of the book itself. Let me first explain how I come to be fulfilling this pleasant office to-night.

Sir Christopher Wren died in 1723. His son, also named Christopher, piously if somewhat incompetently compiled the *Parentalia*, being notes relating to Matthew Wren, Bishop of Ely; Christopher Wren, Dean of Windsor; and Sir Christopher, the Architect. The book can hardly be called a biography, but it has served to supply the materials for the various lives since written. Sir Christopher's grandson, Stephen, published the volume in 1750, Christopher the younger having died in 1747. There is a copy in our Library.

The manuscript of the book is in the Library of the Royal Society, to whom it was "presented by Mr. Wren, February 21st, 1750-1." A reprint of the sections relating to Sir Christopher alone was issued in 1903 by Mr. C. R. Ashbee, and some additional drawings of Wren's churches were included therein. In one respect, however, this reprint does the original publication an injustice. Wren's tract on the Artemision at Ephesus is illustrated by engravings which do not reproduce the extraordinarily delicate execution of the drawings bound up with the manuscript of the *Parentalia*, as do the engravings in the original issue of the book by the hand of Fliteroff.

Stephen Wren was unmarried, yet owned a daughter Margaret, who assumed the name of her father. The copy now on the table bears her autograph on the title-page, and on the very delightful binding her initials "M. W." in gold. By her it was given back into the legitimate line. The family of Sir Christopher ceased in the male line with the death of Christopher Roberts Wren, his great-great-grandson. The latter's daughter married Mr. Hoskyns, who assumed the Wren Arms by Royal License and became Mr. Wren Hoskyns. Her daughter married the Rev. C. F. C. Pigott, and has no children. In Easter 1909 I saw for the first time the heirloom copy of the *Parentalia*. After somewhat prolonged negotiations I was successful in arranging with Mrs. Pigott that I should purchase the volume for £200, if I could secure subscriptions for that amount, in order that the book might be deposited for ever with this Institute. Owing to the generosity of a number of gentlemen, some members of the Institute, some of the Society of Antiquaries, and some of both, I was able to achieve this end, and Mrs. Pigott helped me materially by contributing £45 of the total herself. I should explain that she felt it a duty to receive for the book a sum of not less than £200 which she could bequeath to some collateral descendants of Wren in indifferent circumstances, and she has made provision to this end. I may add that when I first became acquainted with the book, it was designed that it should go out of the country on Mrs. Pigott's decease, and I think it fortunate that by the ready help of the lovers of Wren's memory such a misfortune has been averted. In the box which contains the *Parentalia* I have deposited another, but slim, book which contains a list of the subscribers and their autographs, and I have ventured to add copies of my previous notes on the book, so that its whole story may be conveniently accessible.

I return now to the *Parentalia* itself. It is interleaved with various manuscripts, engravings, and drawings. The original *Parentalia* had eleven illustrations only, viz., portraits of the three great Wrens and of Christopher (the compiler), two plates of mathematical schemes (rather uninteresting), two of the rafters, &c., of the Sheldonian Theatre, one of some architectural diagrams, and the Ephesus plan and elevation already mentioned. To the interleaved copy have been added about 140 engravings, including portraits of Wren's contemporaries and views of his and other buildings, &c., as, for example, Evelyn's plan for the rebuilding of London, in addition to the important manuscripts and drawings I shall now shortly describe and show on the screen.

The *Parentalia* is divided into many Parts, Sections, Appendices, and Tracts, but for the purposes of these notes I will divide it into three, dealing with the interleaved documents relating to the three Wrens:—

1. Matthew Wren, Bishop of Ely.
2. Christopher Wren, Dean of Windsor.
3. Sir Christopher Wren.

The Bishop was elder brother of the Dean, and the Dean the father of Sir Christopher.

The manuscripts relating to Matthew are two only: (a) a Petition by him as Registrar to the King's Majesty as Sovereign of the Order of the Garter, and (b) a page of rough notes apparently headings of sections of the Statutes of the Order.

In the *Proceedings of the Society of Antiquaries* abstracts of both these are printed. In the former, reference is made to the *Black Book* which contained the "chiefest records of the Order"; it is, therefore, of interest to note that this book and other documents were rescued by Dean Wren from the hands of the Trustees appointed by the Long Parliament for sale of the King's goods, "by great application, expense, and long attendance on the Trustees," were preserved by him till his death in 1658, and were handed over at the Restoration to the new Registrar, Dr. Brune Ryves, by his son, afterwards our Sir Christopher.

Venerande Pater,

Sententia quod antequam vulgata est, quam ex ore tuo me habuisse memini,
Parentibus nihil posse videri aspirantem, Turpentes enim sunt, et perpetuae
labores inter pueros, suis immensi quidam amoris indicium. At praecipua
illi mihi toties expetita, quae animam ad bonas Artes, & Virtutem im-
pellant, omnes alios amoris superant. Quod meum est, efficiam, quantam
potero, ne ingrato stant hac maniera. Deus Optimus Maximus conatibus
meis adsit, et Tibi, pro visceribus illis Paterna pietatis, quae maxime
vobis, praestet. Id oro.

Filius tuus

Tibi omni obsequio devotissimus
Christophorus Wren.

Hic tibi primitias Anni, Pater, atq; laborum
Præsto (per exiguas quilibet esse sciam)
Quas pro in meum posse olim cingere, vultu
Si placido acceptos tu, foreaq; sinu.

To you, Dear Sir your Son presenteth here
The first fruits of his pains, and of the Year:
Which may (though small in time an harvest grow,
If you to cherish these, your favour show.

E Musæo meo
Calendis Januarij

1641.

* Scriptur. hoc. A. E. t. h. i. s. u. a. D. e. c. i. m. o.,
d. Octobris 20: elapso: /.

FIG. 1.—LETTER BY WREN IN HIS TENTH YEAR.

We come now to manuscripts relating to Dr. Christopher Wren, who received the Deanery of Windsor and the Registry of the Order of the Garter on the translation of Dr. Matthew Wren from the See of Norwich to that of Ely. These amount to nine in all, and are also described in the *Proceedings of the Society of Antiquaries*.

The next items are various letters to Stephen Wren from the heads of Cambridge colleges acknowledging copies of the *Parentalia* in complimentary fashion.

We now come to the inserted papers relating to Sir Christopher:—

1. A letter in Latin from Sir Christopher Wren to his father, beautifully written and expressing filial gratitude in a high degree, and below a Latin verse with its English translation



FIG. 2.—DRAWING AND LETTER IN LATIN VERSE BY WREN IN HIS FOURTEENTH YEAR.

beneath, dated "E Musaeo meo, Calendis Januarii 1641." At the foot the delighted father has written "Scriptum hoc A^o aetatis suae decimo ab octobris 20^o elapso." A notable production for a boy of nine [fig. 1].

2. A versified paraphrase of the 1st to the 14th verse of the 1st chapter of St. John's Gospel. The penmanship of this, which possibly was written at Westminster under the eye of Dr. Busby, is admirable, and that Wren retained this merit of legibility until the end of his life is evident from later letters.

3. A letter in Latin verse to his father dated 18th September 1645 [fig. 2], dedicating

An act to make
The Dumb to speak.
The Deaf to hear.
to speak amongst others
unheard or understood.
taught in an hours.



The Rules
The five fingers of this left hand are called the 5 places
In every one of these places, are 5 letters, proceeding in y natural
order of the Alphabet
The figures adjoynd to every letter, signifie the first second, third, fourth,
fifth finger of the right hand beginning with y thumb.
The use.
When I would point out any letter, I must p'sently remember his place,
2. the number ~~of~~ thereof, in that place. For example. The word I would
describe out my fingers to a deaf man, or to my friend privily in y midst of
company, let be, sicklye.
S. is y 3. letter in the 4. place, therefore I point with y 3. finger of the right hand, upon
the 4. finger of the left hand.
I is the 4. letter in y 2. place, therefore I point with y 4. finger of y right hand upon the
2. finger of the left hand.
The same reason is sh'ed for other letters.
The left hand must be privily kept out, as in y figures. But in the right hand, that only
signifie must be described out with y number of any letter in his true place.

FIG. 3.—DEAF AND DUMB LANGUAGE INVENTED BY WREN.

Dear

Mr. Simpson having never before met
with a drowned watch, like an ignorant physician has
been so long about the cure, that he hath made me
very anxious that your commands should be so long
deferred, however I have sent the watch at last &
own the folly of it, that it should be so near your
eyes & so often annoy your eye, & be consulted by you
how your time, shall pass, while you employ your hand
in your excellent works. But have a care of it for
I have put such a spell into it, that every beating
of the balance will tell you, 'tis the pulse of my heart
& as much to serve you and more truly
than the watch, for the watch I believe will sometimes
lie & sometimes perhaps be ill & unwilling to go, having
received so much injury by being drowned in that
sinny pit, that I despair it should ever be a true servant
to you more. But as for me (unless you drown me too
in my tears) you may be confident I shall never cease
to be.

June 14th

Your most affectionate,
humble servant

Chas. When

I have put the watch in a box that
it might take no harm, & wrap it
about with a little cotton, & that it might
not jog I was fain to fill up the corners
other with a few shavings or worst paper

FIG. 1.—LETTER FROM WHEN TO FAITH COGHILL WHO BECAME HIS FIRST WIFE.

to him an instrument called "Suum Panorganum Astronomicum," and a tract *De Ortu Fluminum*.

4. On the same sheet are pictures of two hands, headed XEIPOΛΟΓΙΑ.

5. On the next page, another hand and various notes showing the working of the deaf and dumb language invented by Sir Christopher [fig. 3].

6. Love letter written by Sir Christopher to Faith Coghill, who became his first wife [fig. 4].

7. Letter dated 7th March (and probably of 1698) from Sir Christopher, now an old man, to his son Christopher then travelling abroad.

8. Letter dated 12th October 1705, from Sir Christopher to his son again abroad.

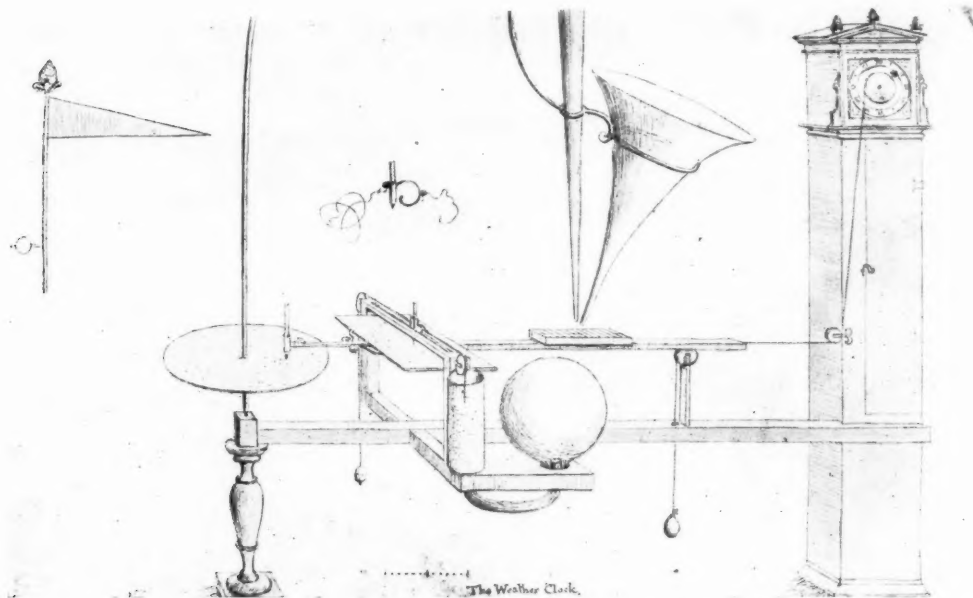


FIG. 5.—DRAWING IN INK OF THE WEATHER-CLOCK INVENTED BY WREN.

9. A summons of 18th November 1713, to Sir Christopher to attend a meeting with the Duke of Ormonde as Commissioner of Chelsea Hospital.

10. A drawing in ink of the weather-clock invented by Wren [fig. 5].

11. Manuscript of the Latin text, fourteen pages foolscap, in the younger Christopher's writing, of the Inaugural Oration delivered at Gresham College in 1657 by Wren, then twenty-five years old, on his being appointed Professor of Astronomy. The *Parentalia* prints an English translation of part of this, and says "The Oration is extant, and may have a place among his compleater works." It has not, however, as far as I know, ever been printed.

12. A large sheet of elaborate tinted drawings showing the anatomy of the river-eel, with full explanatory notes in Latin [fig. 6]. This seems a peculiarly valuable commentary on the wide range of Wren's knowledge and interests.

13. A large sheet dealing with the rising of the sap in trees, beautifully written, but not by Wren.

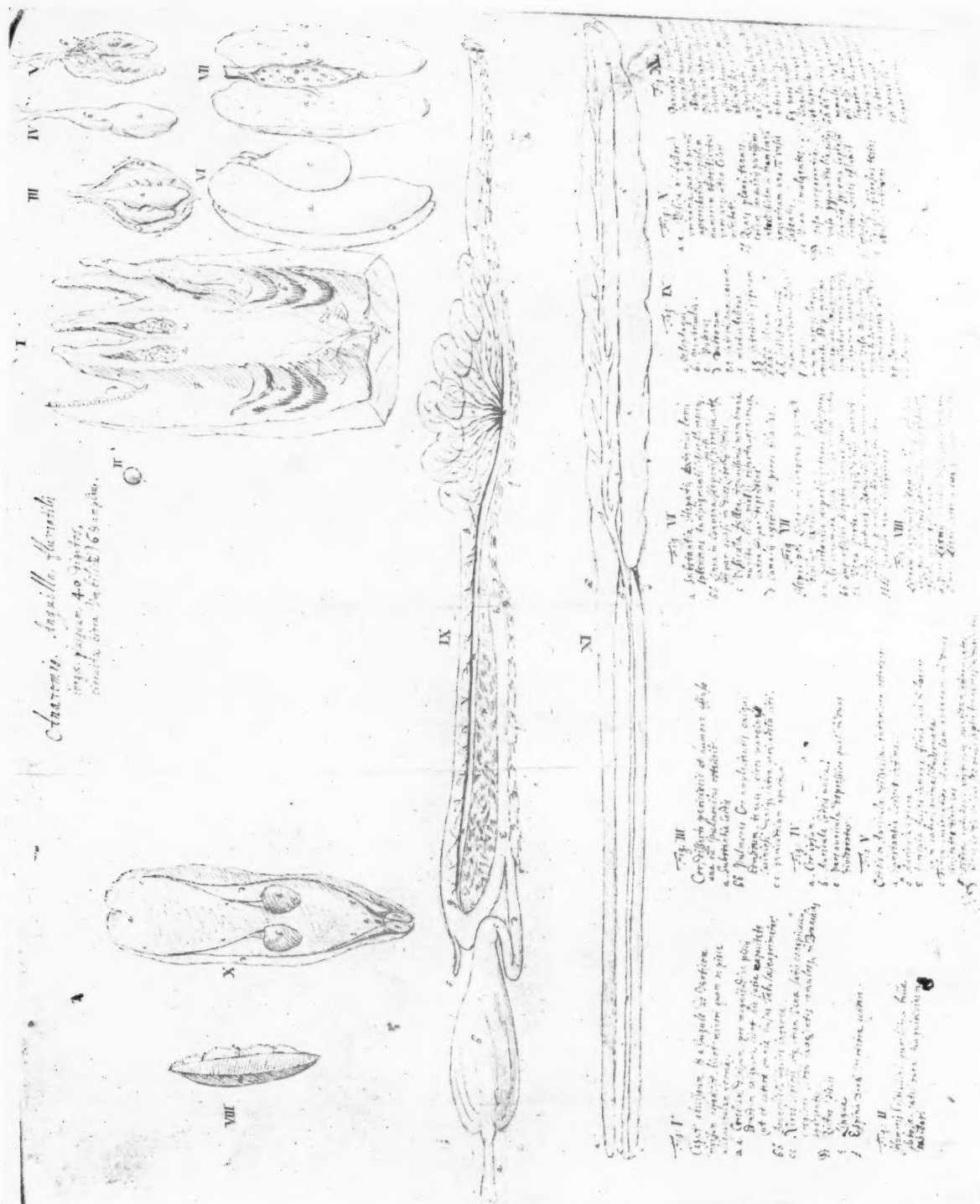


FIG. 6.—DRAWINGS BY WILKIN SHOWING THE ANATOMY OF THE RIVER-FEEL, WITH EXPLANATORY NOTES IN LATIN.

14. Manuscripts of the problem set by Blaise Pascal for the mathematicians of England, and of Wren's solution. These are reproduced by Miss Milman.

15. Thirty pages cut out of a publication called *English Architecture*. The descriptions of those churches of which Wren was architect have been neatly cut out and the chapters renumbered so as to make it a consecutive story.

16. A *Chronologica Series Vitae et Actorum Domini Christophori Wren*, in four pages. Miss Milman says this was prepared by the younger Christopher and collated by Sir Christopher, but on what authority I cannot say. At the end, following the grim note, "Exauctoratus est"—superseded in the 86th year of his age, and the 49th of his surveyorship—are the texts in Greek "And there arose a King who knew not Joseph" and "Gallio cared for none of these things." A fair comment on George I.

17. A manuscript Discourse on Architecture of 14 pages, by Sir Christopher, but in the writing of Christopher his son. This has been printed by Miss Phillimore in an appendix to her *Life of Wren*. I show on the screen an engraving of the Ark, interleaved at this point amongst others pertinent to Wren's argument.

18. Sketch by Wren of his conjectural restoration of the Mausoleum of Halicarnassus [fig. 7]. I dealt at some length with this extraordinarily interesting drawing in the *Architectural Review*, and will delay you no longer now except to show slides (a) of this drawing; (b) of Wren's conjectural plan, which I found at the Royal Society, preserved with the manuscripts of the *Parentalia*; (c) Goodchild's restoration based on that plan [fig. 8]; and (d) Adler's restoration.

Amongst Mrs. Pigott's other possessions are a portrait of Wren as a young man [fig. 9] and the cabinet given to him by Queen Anne, of both of which I show slides.

I also exhibit to-night the engraving, done in the chiaroscuro manner, of Wren's portrait by Klostermann, set in a framework of figures and buildings by Cooke. It is a rare print, and was given to me by Mrs. Pigott, having been previously always in the hands of the Wrens.

Encouraged by our President to give to this evening's Paper something of the character of a Wren festival on a small scale, I have ventured to import matters not relating to the *Parentalia* itself.

Firstly, I have collected and am exhibiting a series of large photographs of buildings either designed by Wren, or attributed to him or belonging to his school, and at each end of the scale have added some buildings which it is reasonable to assume had their influence on his work, and others which in turn were the result, more or less, of his influence.

With the exception of the choir of St. Paul's Cathedral and some College Chapels these photographs show his secular work, and I am indebted for their loan to *Country Life*, from the pages of which paper they are reproduced. In order to make a balance between his secular and ecclesiastical work, I show, by the courtesy of Mr. Batsford, some of the plates which illustrate Birch's *London Churches*. From the same source is an engraving of Cockerell's Tribute to Wren, with the added interest of a document (included in the frame) bearing Wren's signature.

My next exhibit is, perhaps, not the least interesting. In the Library of Shirburn Castle there is a copy of Wotton's *Elements of Architecture*, first edition, 1624, annotated by the hand of Sir Christopher himself. By the courtesy of the Earl of Macclesfield I am able to show you some photographs of the more interesting pages [fig. 10].

The principal annotations are as follows:—

On page 48 Wren makes a practical query with regard to the laying of stones or bricks wedgewise in a flat arch. Where Wotton says of staircases (on page 58) that "the breadth of every single step should never be less than one foot, nor more than eighteen inches," Wren adds "nor so much as eighteen inches at any time, for if a step exceed twelve, those

will appear half the Face, or like the Facade of a Tuscan Temple, to which the Breadth of the Porch of the Porticus, & the Hall, supply the Place of an Entablature.

I have been the longer in this Description, because the Fabrick was in the Age of Pythagoras and his School, when the World began to be fond of Geometry and Arithmetick.

13. In all the Editions of Pliny for *Tricentum* read *Tricentum*, as the sense requires.

Statue of Mausolus.

in the Mausoleum

plaza

32 feet a
square.

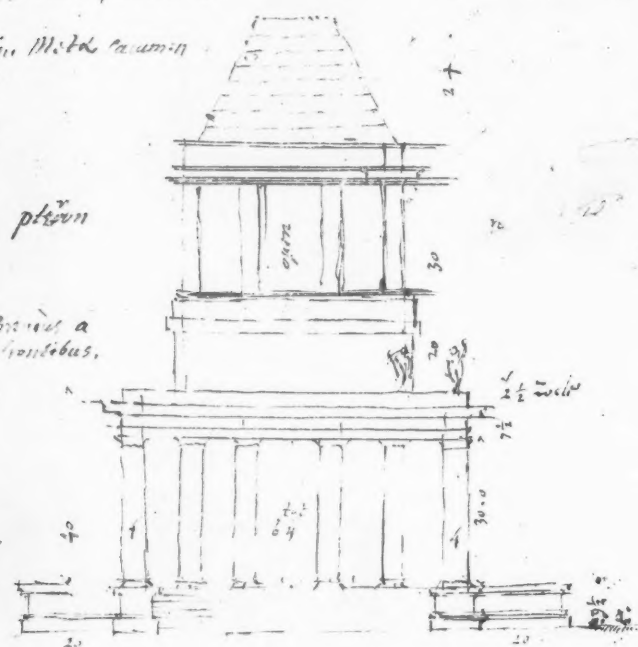


FIG. 7.—WREN'S SKETCH ELEVATION OF THE MAUSOLEUM OF HALICARNASSUS.

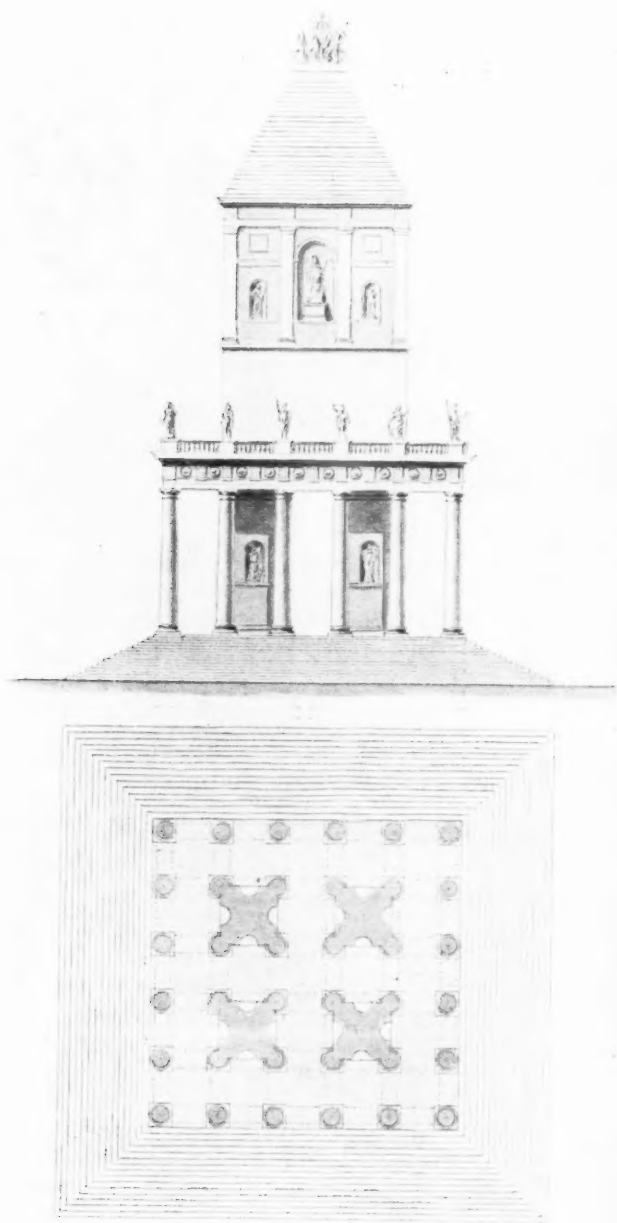


FIG. 8.—GOODCHILD'S RESTORATION OF THE MAUSOLEUM BASED ON THE "PARENTALIA."

who have but short (legs) must tread twice upon the same step, especially in descent, which, to women especially, is troublesome, and dangerous to the hasty." One bears in mind in this connection that Wren himself was of short stature. He adds other notes on the making of staircases on the same page. On page 55 Wotton discourses of the advantage of luminous rooms, "Indeed, I must confess that a frank light can misbecome no edifice whatsoever, temples only excepted, which were anciently dark, as they are likewise at this day in some proportion, devotion more requiring collected than defused spirits," on which Wren makes the comment that Christ Church in London was practically nothing but window, and was fitter for a stage than for a church, "although for the kind of building it is a thorough piece of work." On gardens and their treatment with aqueducts, walks, &c., Wren makes the note, "And for disposing the current of a river to a mighty length in a little space I invented the Serpentine, a form admirably conveying the current in circular and yet contrary motions upon one and the same level with walks and retirements between to the advantage of all purposes, either of gardenings, plantings, or banquetings . . . far beyond the bungary (!) invention at Hatfield so much liked for pleasure." Up and down the book there are scattered all manner of other interesting notes. There is a practical thought in Wren's reference to the very small chimneys in use in Spain, where charcoal was sold by weight. He has evidently had difficulty with smoky chimneys, for to Wotton's observation, "Then there is a repulsion of the fume by some higher hill or fabrique that shall overtop the chimney," he makes the significant comment, "as in our buildings here." To Wotton's recommendation that exact models should be made of all proposed buildings, Wren adds that the model made for the fabric of the new schools in Oxford was three feet square and cost twenty marks. In connection with terracing any story (by which Wotton seems to have meant the making of loggias), Wren remarks, "Terracing is most commended in hotter climates, and in our country must serve mostly for summer rooms." To Wotton's general reflection that "various colours on the out-walls of buildings have always in them more delight than dignity," Wren adds the criticism in Latin that in this particular the noble building of Lord Exeter at Wimbledon also offends. He seems, however, to have been friendly to the use of mosaic, for he says, "Herein excels that excellent cave at Bodington wherein stands the brazen hydra with seven springs out of seven heads."

On page 79 are some careful notes and a diagram relating to the construction of timber roofs.

With regard to the art of the plasterer, Wotton had said, "Plastique is not only under sculpture, but indeed very sculpture itself, with this difference that the plasterer doth make his figures by addition, and the carver by subtraction." Wren makes short work of this with, "This proposition can never hold true to the name of sculpture."

At the end of *The Elements* Wotton promises another work, "A Philosophical Survey of Education, which is indeed a Second Building or Repairing of Nature, and, as I may term it, a kind of moral architecture." Wren must have taken considerable pleasure from *The Elements*, for in the margin he has written "Oh that we might see that, so long expected."

My next exhibit is an interesting little book in my own possession. It is a copy of the third edition of Elyot's *Governour*, published in 1546 and bearing on the title-page the autographs not only of Sir Christopner Wren, but of his father, Dean Wren. It is of interest to find that the index of the volume gave a wrong reference to the page on which are found Elyot's comments on "othes." This mistake in the index has been corrected in ink. When we remember that Sir Christopher posted up at St. Paul's a somewhat drastic warning to workmen who indulged in profanity, it is at least not impossible



FIG. 9.—PORTRAIT OF WREN AS A YOUNG MAN.

that before drafting his notice he looked up the *Governour* to see what Elyot had to say on the subject, and in looking it up, discovered the index was wrong, and corrected it.

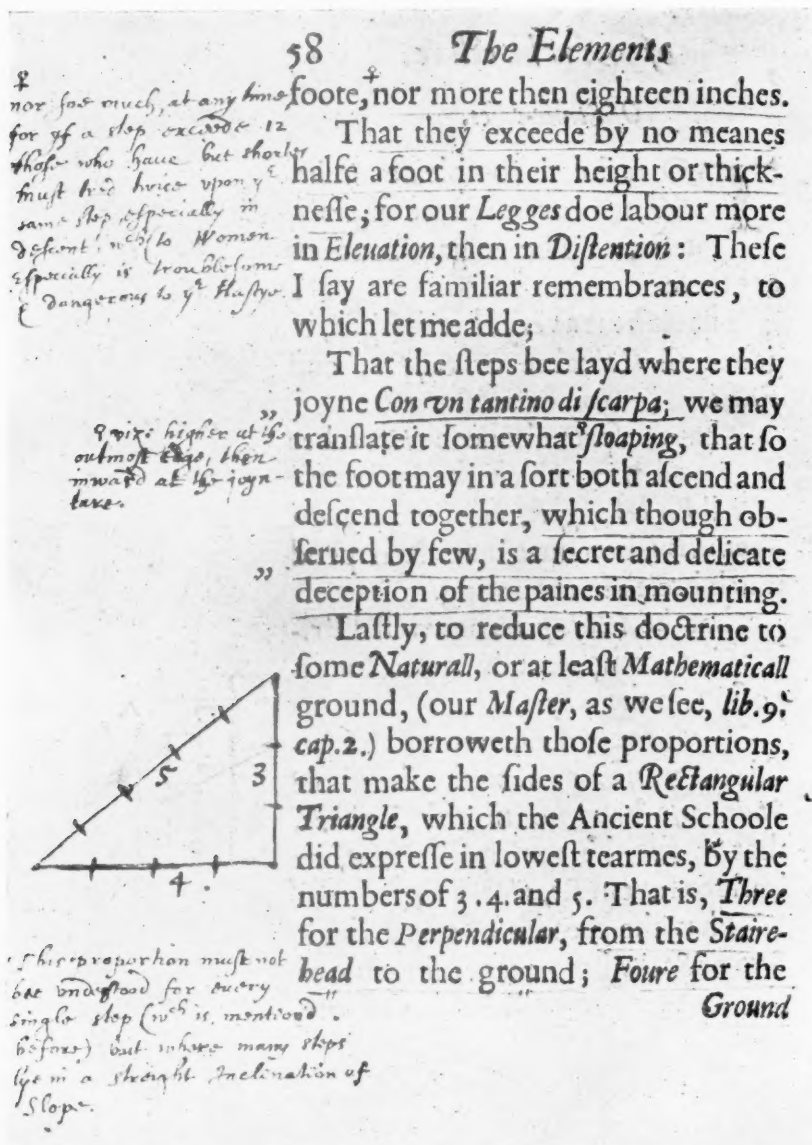


FIG. 10. PAGE OF WOTTON'S "ELEMENTS OF ARCHITECTURE," FIRST EDITION (1624) ANNOTATED BY WREN.

I am afraid you will think my exhibits are rather miscellaneous. The next is a photograph and two drawings of the Manor House, Grooms Hill, Blackheath. This is not

generally accepted as being the work of Wren, but the deeds show that it was built in 1697, and this coincides exactly with the time when Wren was building at Greenwich and Morden College. Moreover, the treatment of the panelling is very distinctly in the Wren manner. Sir James Robinson, for whom the house was built, was acting as a Crown officer in this district at the same time as Wren, and would be in intimate touch with him.

I am indebted to Mr. J. W. Dinwiddy for the loan of these pictures.

I also exhibit, by the courtesy of the Bath Stone Firms, Ltd., the originals of some warrants and correspondence of Wren, in connection with the obtaining of the Portland stone for the building of St. Paul's Cathedral.

My last point is a somewhat vague one, but is perhaps worthy of a brief record. I have been informed that there is a lady living, named Mrs. Howe, who claims to be descended from Wren in the direct line. This cannot be established, but she appears to be descended from a Thomas Wren, of Ware, Hertfordshire, who had a certain reputation as an architectural sculptor and as a modeller of plaster ceilings. It is, at all events, of some interest to know that other people of the same name were concerned with architecture, and my reference to it here may possibly be the means of bringing something more definite to light.

Nothing now remains to me but to thank you for listening to remarks which I am afraid are particularly disjointed, and to express once more my pleasure at having been the means, however humble and indirect, of securing to the Institute the possession of the heirloom copy of Wren's *Parentalia*.

P.S.—Since the above was in type, the news has reached me of the death on the 12th June of Mrs. Pigott, the last owner of the interleaved *Parentalia*, to whom reference has been made. I feel sure that the Institute will learn with deep regret of the death of the last surviving direct descendant of Sir Christopher Wren.—L. W.



VOTE OF THANKS.

THE PRESIDENT (MR. LEONARD STOKES): I feel sure you wish me, Gentlemen, to accept this volume from Mr. Weaver, on your behalf; and, in doing so, to express our grateful thanks for all the trouble he has taken in the matter. I will ask Mr. Statham to propose a formal vote of thanks.

MR. H. HEATHCOTE STATHAM [F.]: I have the privilege of asking you to record a vote of thanks to Mr. Weaver for this exceedingly interesting paper, which has brought before us a good many interesting personal characteristics of our great architect. There is one point on which I should like to put a query, namely, on the remark that plaster was an art in which modelling was done by addition, and sculpture by subtraction, and Wren's very caustic dismissal of that observation. I think the remark was perfectly right before the days of clay modelling. We all know the description of how Michael Angelo flew at a block of marble as if he would tear a figure out of it, and that was by taking away part of the substance of the marble. Of course, in these modern days, when sculpture is all modelled in clay first, sculpture is done by addition as much as is plaster-work. But, at the time when Wren wrote, the remark was right, and Wren was wrong. This has been described as a sort of Wren Festival. I would suggest a word or two as to exactly what it is that we really owe to Wren. And I begin by quoting the words of a better man than myself, in a brilliant lecture which was given, many years ago, by Professor Lethaby, a lecture which will be remembered by all who were present at it. He said: "It was the peculiar merit of Wren that he saw exactly what could be done with the Renaissance box of bricks." That is a very characteristic way of putting it. Architecture, at the time that Wren practised, was no longer, as in the Mediaeval period, the evolution of masonry design out of construction; it was the putting together of details which were all there for you by tradition. You had your column and cornice and the other details, and you knew exactly what they were all to be; and the question was how to put them together for the best effect. I think Wren took some things out of the box of bricks which he might have left alone, and there has been a rather too indiscriminate worship of his work. For instance, all those carved swags of realistic fruit and flowers; as Ruskin said, on St. Paul's Cathedral they are like so many Van Huysum flower pictures cut into stone. I think you have only to remember the best carved details of Greek and Byzantine work to feel that. And I think it is rather a pity that these things are imitated nowadays by people who think that they are carrying on the style of Wren. But I do not believe that Wren had much to do with them. Those were not the days of the full-size

detail drawings. Wren got his columns in their places, and sketched in roughly where the swags should come, and an accomplished carver of the period worked it out in his own way. So what was it that Wren really did in his putting together, in Mr. Lethaby's phrase, of materials from the Renaissance box of bricks? I think that Wren, almost more than anything else, showed us that architectural design means the expression of an idea in plan and section. That is almost more remarkably shown in his numerous London churches than even in his great Cathedral. Look at the plans of those churches; there are no two of them alike, but they each express an idea. And all the towers which he built, although the details are, again, taken out of the box of bricks, are different; each one a different idea. And in spite of the fact that much of the detail is open to criticism, we see in those churches a representation of architecture as a means of expressing ideas, independently of detail. There was one further quality which Wren added to the others; that which is called, ironically, common sense, because it is so very uncommon. I was once shown by Mr. Penrose a very characteristic instance of that. I was in St. Paul's Cathedral with him. We had been looking at the model of the first design for the Cathedral—the design which I think most of us wish had been carried out instead of the present one. At the end of the gallery in which the model stood was a door, opening immediately upon a rather steep set of stone steps leading down to a lower level. And Penrose pointed out to me that the first step was on the inside of the door. He said Wren was not going to catch you with a sudden fall of steps without your knowing it, so he put the first step inside, so that you might know there were going to be steps. It is a little thing, but it is a very good instance of Wren's common sense. Some of us may remember a certain modern clock tower in London, in which the architect quite forgot that the clock weights wanted a chase to fall down; and two or three thick stone landings had to be cut through afterwards to let the weights fall. I do not think Wren would ever have made that mistake. Through all his works you find that feeling; he always realised what had to be done, and he made allowance for it. But, to come back to my main point, I think that the real point for which we may honour Wren as an architect is, that he showed that, in spite of designing in what was rather a bad school, in spite of much questionable detail, he showed how architecture should be made to express, as I have said, ideas, very various ideas, in plan and section. And that is what I believe architecture means.

MR. PAUL WATERHOUSE [F.]: Sir, I hope you will allow me, with no qualifications, but with

much enthusiasm, to second this vote of thanks. I think that the word which springs to one's lips as one looks at the illustrations of Wren's thought in these drawings is Leonardo. One realises that Wren stands up a large and conspicuous figure among that very small group of men who have seemed capable of excelling in almost anything that they put their hands to. Leonardo is the prince of those men; and Wren seems to have come very near him. We have had illustrations to-night of his extraordinary versatility of character; and one is led once more to formulate the theory that the greatest architect must necessarily be a man of all-round knowledge. It is a pleasant theory, and one which we continue to endeavour to hold, though it is constantly overborne by facts. We have been shown to-night that, besides his many other qualifications, Wren was, as we might have expected, a humourist of the finest kind. I am sometimes tempted to think, in connection with creative artists like architects, of Bacon's division of men into three classes, represented by three insects: the ant, the spider, and the bee. I hope there are very few architects who are spiders in Bacon's sense. The meaning of Bacon's comparison was that the ant was a collector and nothing else, the spider was a producer without collecting, and that the bee, the most assiduous of collectors, was also the most splendid of producers. The best architect, of course, is the bee. If any man was qualified to be a spider, it was Sir Christopher. His force and inventive genius were such that he might, if he had been foolish enough, have thrown the past aside and started afresh. Thank Heaven he did nothing of the kind. The humblest makes the greatest of men. He realised the immense power of working in harness, and he industriously collected himself the harness in which he so successfully worked. I feel that we owe a very great deal to Mr. Weaver, not only for the work he has undertaken in engineering this gift, which without him could not possibly have taken place, but also for the extremely sympathetic and delightful manner in which he has put before us the value of the book which he has been instrumental in securing to us. He has given to us fresh lights on the character of Wren, and he has done it with a genial sympathy which I feel sure would delight even the spirit of Wren himself.

THE PRESIDENT: In asking you to pass this vote of thanks, I would call your attention to the fact that Mr. Weaver has collected this very magnificent exhibit of photographs, prints, and drawings which you see on both sides of the room, and I hope you will look at them before you go home this evening. I now have pleasure in asking you to pass a most hearty vote of thanks for his interesting paper and the collection of illustrations which he has brought before us this evening.

The vote of thanks was carried by acclamation.

In the introduction to his Paper Mr. Weaver mentions that in the box which contains the *Parentalia* he has deposited another book comprising notes and memoranda connected with the presentation copy, so that its whole story may be conveniently accessible. This is a tastefully got-up small folio in white buckram, entitled "Some Notes concerning the Interleaved Heirloom Copy of Wren's *Parentalia* presented to the Royal Institute of British Architects at the Ordinary General Meeting held on 26th June, 1911, by Lawrence Weaver, on behalf of the Subscribers whose names are given overleaf." This and the following brief Preface form an interesting historical note:

"The Interleaved Heirloom Copy of the *Parentalia* was in the possession of Sir Christopher Wren's family until 1911, when it was purchased from his last surviving direct descendant, Mrs. Pigott, on behalf of a body of Subscribers. They contributed five pounds each, with the exception of Mrs. Pigott herself, who subscribed forty-five pounds, so that the amount of £200 might be made up. This sum she has by Will devised to some collateral descendants of Sir Christopher Wren. It is the desire of the Subscribers that the volume shall be preserved in the Library of the Royal Institute of British Architects for ever, as a memorial of one of England's greatest artists."

On the following pages are the names and autographs of the donors—viz.: Sir Lawrence Alma-Tadema, O.M., R.A. [*Hon.F.*]; John Belcher, R.A. [*F.*]; W. D. Caröe, F.S.A. [*F.*]; Thomas E. Colcutt [*F.*]; Hubert C. Corlette [*F.*]; "Country Life"; John D. Crace, F.S.A. [*Hon.A.*]; E. Guy Dawber [*F.*]; Sir Ernest George, A.R.A. [*F.*]; H. Wilson Holman, F.S.A.; Edward Hudson, F.S.A.; Sydney D. Kitson, M.A., F.S.A. [*F.*]; W. R. Lethaby, F.S.A. [*F.*]; Sir W. H. Lever, Bart. [*Hon.A.*]; R. S. Lorimer, A.R.S.A. [*F.*]; Edwin L. Lutyens, F.S.A. [*F.*]; Arnold Mitchell [*F.*]; Albert W. Moore [*F.*]; John Murray [*F.*]; Ernest Newton, A.R.A. [*F.*]; Sir Charles Nicholson, Bart. [*F.*]; Philip Norman, F.S.A.; Mrs. Pigott; Sir George Riddell; John S. Sargent, R.A. [*Hon.A.*]; Frank W. Simon [*F.*]; John W. Simpson [*F.*]; John Slater, B.A. [*F.*]; Leonard Stokes [*President*]; Edward P. Warren, F.S.A. [*F.*]; Paul Waterhouse, M.A. [*F.*]; Lawrence Weaver, F.S.A. [*Hon.A.*]; Sir Aston Webb, C.V.O., R.A., F.S.A. [*F.*].

The volume also contains two MS. letters from the late Mrs. Pigott relating to the purchase of the work, dated in February and March last, and prints of Papers by Mr. Weaver on the subject of the heirloom copy which have appeared in the *Proceedings of the Society of Antiquaries*, the *Architectural Review*, and *Country Life*.

REVIEWS.

BUILDING CONSTRUCTION.

Building Construction, in 2 vols. Vol. I. By Beresford Pite, Frank Baggallay, H. D. Searles-Wood, E. Sprague. (The Architects' Library.) With Illustrations. 8vo. Lond. 1910. Price 18s. net. [Longmans, Green & Co. 39 Paternoster Row.]

The second work of "The Architects' Library" Series, the first volume of which has now been issued by Messrs. Longmans, Green & Co., deals with building construction.

In his short preface Professor Simpson, the Editor, states that the aim of this work is, "whilst treating the subject in a practical manner, to give it also architectural expression. Existing books on Building Construction are in most cases excellent in some respects, but too often fail to place before students the treatment which is necessary if buildings are to be not only sound but also architecturally satisfactory. Building Construction in itself is merely a skeleton; its effective covering is Architecture."

The task of clothing the dry bones has been entrusted to Professor Beresford Pite, Mr. Frank T. Baggallay, Mr. H. D. Searles-Wood, and Mr. E. Sprague.

Professor Pite's contribution deals with brickwork in a comprehensive manner from foundations to chimney stacks. The nature and methods of manufacture of the materials employed are described and the historical aspect of the subject is touched upon.

In referring to the question of foundations, Professor Pite very rightly lays stress on the fact that the texture of the subsoil should be equally solid over the whole area covered by the building. He goes on to say that foundations of such portions of buildings as have to carry a great weight, as in the case of a church tower, should be put in separately and be detached from the abutting walls. This is hardly feasible in the case of a tower abutting upon an arcade, as it would necessitate a straight joint between the tower pier and the respond of the arcade, otherwise the detachment of the foundation would appear to be of little use. The advisability of employing a reinforced concrete raft might be urged as an alternative.

The diagrams showing the depth of concrete necessary in foundations seem to err, from a practical point of view, somewhat on the side of economy. The depths given are as follows:—

For a wall of 1 brick in thickness, $7\frac{1}{2}$ inches	
" " $1\frac{1}{2}$ bricks " " $11\frac{1}{4}$ "	
" " 2 " " " 15 "	
" " $2\frac{1}{2}$ " " " $18\frac{1}{2}$ "	

It is not stated whether these dimensions are intended for cement or lime concrete.

Theoretically the thicknesses given may be sufficient, provided that the subsoil is absolutely homogeneous and of uniform texture, but in practice it

is doubtful whether it is wise to allow anything less than 18 inches in thickness for walls of more than one story.

In the chapter on walls, piers, and arches, Professor Pite draws attention to the failure of many piers in mediæval buildings formed of clusters of columns grouped around a central shaft or cylinder of masonry, owing to the central pier being built of several courses of stone and the surrounding shafts having few horizontal joints. Precisely similar conditions exist in modern composite structures, in which steel stanchions are used in conjunction with brick or stone walls, and allowance should be made in their construction to guard against failure due to unequal settlements. The difficulties in connection with the construction of hollow walls are dealt with in a thorough manner, but, in this connection, the advisability of employing iron ties in a building intended to be of any permanence may be doubted. Galvanising, or other protection, is only a temporary expedient, which will in course of time disappear, with the result that the iron will rust and cause disintegration in the wall. A further point of importance, often overlooked, is that the cavity should not be stopped short of door and window openings. The simplest and most effective method is to run the cavity out at the jambs of openings and close it up with tiles or slates in cement before fixing the frames and linings.

Many architects will probably disagree with Professor Pite as to the necessity for keeping "perpends" in brick facings. Provided the bond is properly observed, an exactly true line in the vertical joints would not appear to be essential, and a slight irregularity in this respect gives a variety and texture to the work which is pleasing to the eye.

In the section on stonework, Mr. Baggallay deals fully with the various classes of material, the methods of conversion, and the different tools employed for the purpose, and the construction of walls, arches, vaults, &c.

The "Report with reference to the selection of stone for building the New Houses of Parliament," still perhaps the best work on the subject, has been drawn on in some measure for the classification and description of the different varieties of native building stones.

The diagrams in this section, as well as in that on brickwork, are exceptionally good, and well explain the points referring to them in the letterpress.

One could have wished that Mr. Baggallay had expressed himself a little more strongly against the pernicious practice of pointing masonry with a projecting joint, a treatment which is one of the most fruitful causes of decay in stonework. The mortar should never be allowed to project beyond the face of the stones, and is better kept back a little behind it. Some of the elementary principles connected with masonry, which one would have expected to be dealt with in a book for students, do not seem to have been touched upon; such, for example, as

the necessity for mitres and stops being worked on the solid, the jointing of mullions in short lengths to avoid a similar trouble to that mentioned by Professor Pite in connection with clustered columns, and the advisability of not jointing sills under mullions.

These are matters which may, perhaps, be considered architectural commonplaces, but many a modern building is marred by the non-observance of such details.

Mr. Searles-Wood's essay on Carpentry is somewhat disappointing in that it leaves the reader unsatisfied and wishing for more. Some further examples of roofs might well have been given, and an historical review of the development of roof construction would have been interesting. Possibly, however, such a treatment was considered outside the scope of this work.

The final section of the book, dealing with construction in metals, stresses and strains, &c., is contributed by Mr. E. Sprague. It contains numerous calculations and formulæ, the merits of which the average architect will, doubtless, while acknowledging their usefulness, be content to leave to the judgment of the engineer.

Altogether the collaborators are to be congratulated on the manner in which they have succeeded in presenting old friends in new dresses, but it is to be regretted that the price of the work makes it beyond the means of the majority of students, for whom it is evidently designed. If it had been found possible to produce it at about one-third of the cost its usefulness would have been increased threefold.

HERBERT PASSMORE [J.].

THE SCIENCE OF ART.

The Beautiful Necessity. Seven Essays on Theosophy and Architecture. By Claude Bragdon. Rochester, N.Y. The Manus Press, 1910. Price 10s. net. [B. T. Batsford, 91 High Holborn, W.C.]

To a Britisher there is a certain freshness in the American frame of mind. It is persistently active. It accepts nothing without inquiry, and after inquiry it asserts all the ancient faiths or fallacies that it has discovered just as though they were original thoughts. This rejuvenating process is of value to the old country as well as to the new, just as the observations of the growing intellect of a child are stimulating to the jaded minds of its elders. In the field of architecture it is of especial value for two reasons, the first because the architect who lives in the Old World is so thoroughly accustomed to the time-honoured masterpieces which surround him that the lessons which they teach have lost for him something of their original meaning; and the second because the American architect takes himself so seriously in his study of those masterpieces that he is well qualified to enforce their significance.

Mr. Claude Bragdon revives interest in the parallel that has been drawn between music and

architecture as exemplified in the great works of both arts. After explaining the theosophic view of art, he writes: "Music, which is in time alone, without any relation to space, and architecture, which is in space alone, without any relation to time, are thus seen to stand at opposite ends of the art spectrum, and to be, in a sense, the only 'pure' arts, because in all the others the elements of both time and space enter in varying proportions, either actually or by implication." . . . "In another sense music and architecture are allied. They alone of all the arts are purely creative, since in them is presented, not a likeness of some known idea, but a *thing-in-itself* brought to a distinct and complete expression of its nature." . . . "The characteristic differences between music and architecture are the same as those which subsist between time and space. Now time and space are such abstract ideas that they can be best understood through their corresponding correlatives in the natural world, for it is a fundamental theosophic tenet that nature everywhere abounds in such correspondences; that nature, in its myriad forms, is indeed the concrete presentment of abstract unities," and so on.

He proceeds to consider the history of the architecture of the civilised world as it appears from the standpoint that he has taken up. Egyptian pyramids, Greek temples, Roman amphitheatres, Gothic cathedrals, and Renaissance palaces are passed in review to illustrate the idea of reincarnation, and just a glimpse is shown of a possible future course of architectural development.

The greater part of his book, however, is devoted to the difficult task of systematising the natural laws of beauty. That there are laws of nature which are also the laws of art will be generally admitted by architects. There is something that controls a designer, although it may evade his comprehension. An architect sometimes feels that the solids and voids, the lines and surfaces of his buildings are in some degree influenced by an abiding power that has guided others and still will guide. In some measure, the measure perhaps of their excellence, they follow certain rules of shape, proportion, composition and the like, which seem to be generally applicable, irrespective of style, period, or locality, and to embrace within their scope not only architecture but all forms of human expression. But although the laws of beauty are thus recognised most people are content to accept the fact of their existence without inquiry and to leave them undisputed yet undefined. Not so Mr. Bragdon. He has squarely faced the problem of their formulation and has expressed himself in excellent English, although he has used rather a lot of hard words.

He has not been afraid to summarise his conclusions: "First comes the law of *Unity*; then, since every unit is, in its essence, twofold, there is the law of *Polarity*; but this duality is not static, but dynamic, the two parts acting and reacting upon one another to produce a third, hence the

law of *Trinity*. Given this third term, and the innumerable combinations made possible by its relations to and reaction upon the original pair, the law of *Multiplicity in Unity* naturally follows, as does the law of *Consonance*, or repetition, since the primal process of differentiation tends to repeat itself, and the original combination to reappear, but to reappear in changed form, hence the law of *Diversity in Monotony*. The law of *Balance* is seen to be but a modification of the law of *Polarity*, and since all things are waxing and waning, there is the law whereby they wax and wane, that of *Rhythmic Change*. *Radiation* rediscovers and re-affirms, even in the utmost complexity, that essential and fundamental unity from which complexity was wrought."

It will not be fair to give this quotation without adding that the little volume is not in any way like a forbidding book of rules. The whole trend of thought that it contains is very interesting, and it is presented in an engaging manner.

An essay on the proportions of the human figure in which the principles of natural beauty are illustrated, two on the geometry and arithmetic of beauty, and another headed "Frozen Music," complete the book. It would be pleasant to trace each essay in detail, and to enter into the various matters for argument that the book contains, but that course would be too great an adventure to attempt within the limits of a review.

The illustrations are good. Each consists of a few simple lines which give all that the author seems to have needed and no more. They are witnesses in support of his statements in the letterpress. Natural objects and buildings of unquestionable merit are examined to prove that they have obeyed the laws, and their evidence is most convincing; but it must be remembered that it is the laws, not the subjects, that are on trial. It is the truth of those laws that the book has sought to emphasise. The reader of the book may undertake a cross-examination. He may turn to his favourites among the masterpieces of art and test them by an application of the principles that are elucidated in the book. He might even refer to his own work—to the best thing that he has done so far—and see whether ("like the bird and the bee") he "has followed the rules without knowing them." Such an exercise will be instructive, and its result may be to point out causes of failure in some cases; but after the reader's curiosity is satisfied he should forget the book and its teachings before he starts upon a new composition, for although a comprehension of the natural laws of beauty is of use in the critical analysis of a design that has been achieved, it is a positive hindrance to the solution of the complementary problem of synthesis. After all manner of study, the creation of a work of art may well be approached by an artist in the virginal manner.

The volume is published in America, but copies may be obtained from Mr. Batsford.

J. NIXON HORSFIELD [A.].

REINFORCED CONCRETE.

Lectures on Reinforced Concrete: Delivered at the Institution of Civil Engineers in November 1910. By William Dunn, Consulting Engineer for Reinforced Concrete Construction to His Majesty's Office of Works, F.R.I.B.A., Assoc.Inst.C.E. 8vo. Lond. 1911. Price 7s. 6d. net. Diagrams in portfolio separate, 5s. [Hodder & Stoughton, Warwick Square, E.C.]

This book, published by the University of London Press, consists of a series of lectures on reinforced concrete, and is of such a nature as to serve as a useful introduction to anyone beginning the study of the subject, as well as containing much information valuable to those who already have some knowledge of the methods of calculation and construction usually employed in reinforced concrete.

As pointed out by the author, the subject cannot be dealt with exhaustively in such a short space, but he has succeeded in covering a great deal of the ground without being unduly brief. While an advocate of reinforced concrete properly applied, the author does not exaggerate its possibilities, and at the same time calls attention to the necessity that architects, engineers, and others concerned with building work, should arouse themselves to the study and application of this material.

Some methods of calculation for columns and beams are given, with many hints useful to anyone desirous of compiling tables and diagrams to facilitate calculations. Examples of those tables are given in the text, and a most useful set of diagrams for the solution of T beams are also added in the form of an appendix. No general formulae for the solution of beams are given, the calculations being confined to the case where fixed working stresses in the steel and concrete are maintained. This limits the applicability of the tables and may be somewhat misleading to those unaccustomed to deal with such calculations, as in practice it is not always possible to work to the theoretically correct ratio of reinforcement necessitated by this method.

The chapter on retaining walls is especially good, dealing briefly with earth thrusts and the method of designing reinforced concrete walls to meet these thrusts, and pointing out the economy which can often be effected by using this type of wall when contrasted with the mass type more usually employed.

There are excellent chapters dealing with quantities, costs and failures, clearly set out and valuable to all concerned with the design or erection of reinforced concrete structures. A simple graphical solution for continuous beams is given in an Appendix which enables the bending moment for any condition of loading to be determined easily, and is very suitable for dealing with continuous beams subject to variation in loading.

The use of reinforced concrete for bridges is dealt with briefly, without entering into the calculations for arches and other forms, but many useful diagrams are given and the advantages of reinforced

concrete as a material for this purpose clearly put forward.

The book throughout is well illustrated and got up, and is a useful addition to the existing literature on the subject. Many important practical points are touched on, which points deserve a lot of attention and necessitate the close reading the book merits.

J. GIBSON FLEMING (Capt. R.E.)

THE LATE JOHN DOUGLAS.

By the death of John Douglas, of Chester, the architectural profession has lost one of its most gifted members. Endowed with the great natural gift of inventive or imaginative power of design, it is fortunate that his early professional education began in an atmosphere where gifts were fostered and directed into the higher sphere of ambition, while the mind was cultivated to receive the best impressions. He thus commenced his creative career in the knowledge of the true functions of architecture and those essential qualities which distinguish good design from bad. His personal friends alone know his real worth, for modesty—which is said to be the quality of genius—occupied a prominent position in his nature.

He was a Cheshire man by birth, but his early training was obtained in the office of Sharpe and Paley, of Lancaster, then noted practitioners in the North of England. Leaving that office he went to Chester, where he practised for fifty-six years. His death took place on 23rd May, at his residence "Walmoor Hill," Dee Banks, Chester, in his eighty-second year.

The architecture of Mr. Douglas is not confined to any particular district or class of work. On the contrary, his buildings are to be seen from St. Andrews in Scotland to Surrey in the South, and their variety of purpose covers an equally wide range. Churches, mansions, grammar schools, banks, farmhouses, park lodges, cottages, memorials, and the half-timber houses of city streets, all seemed to respond to his pencil with equal originality and freshness—proving great artistic creative instinct—and all bearing the impress of his individuality.

In the city of Chester the work of Mr. Douglas is seen in such profusion, and is of such a high character, that the education of the public in Architecture has received a definite impetus, and its effect on the progress and condition of contemporary Art shows itself repeatedly when questions affecting buildings in and about the city are under consideration. Long may this influence continue!

It is unnecessary to attempt a complete list of his works, but the following will give an idea of its comprehensiveness and character. His titled patrons were many, and when he was a young untried architect, with fame still to be won, he received much encouragement by commissions from the late

Lord Delamere. "Abbeystead," the stone house which he built for the late Lord Sefton at Wyresdale, near Lancaster, is well known to architects as a charming example of his work. At Croxteth Park, Liverpool, kennels were built for the present Lord Sefton. But it was the late Duke of Westminster who gave Mr. Douglas such exceptional opportunities of showing his skill in the complex art of Architecture. His Grace, himself a great lover of the characteristic style of the architecture of Cheshire—the black and white half-timber work—found in Mr. Douglas a man of the same taste, and as a result the Eaton estate is studded with beautiful erections comprising farmhouses, the "Weighing Machine" Lodge, the Eccleston Lodge, "The Paddocks," Eccleston (the residence of the Hon. C. T. Parker, the Duke's agent), Colonel Lloyd's house, and the Eccleston Hill Lodge. This latter deserves a special word. It is a stately arched lodge spanning the drive, altogether an exceptionally fine piece of work and one of the architect's best accomplishments. For the late Duke, Mr. Douglas also designed several beautiful churches, including Aldford and Pulford churches on the Eaton estate, and Halkyn church on the Flintshire estate.

For other clients must be mentioned that dignified and noble church standing on the hillside at Barmouth—by many considered to be the finest modern church in North Wales; the beautiful little Memorial Church at Deganwy for Lady Augusta Mostyn, so fitting into its position as to have a double beauty; a Memorial Church and Vicarage at Bryn-y-maen on the highlands above Colwyn Bay; and the larger town church in the centre of Colwyn Bay. To this latter church a pathetic interest is attached. The nave was built several years ago, and the last professional work in which the veteran architect interested himself was the tower, still in course of erection, which he longed to see finished. The Church of St. Ethelwold's, Shotton, initiated and munificently supported by the late Mr. W. E. Gladstone, is an example of his early work, while the new aisle of St. John's, Chester, with the restored porch after the downfall of the great tower, are often cited by archaeologists as a satisfactory solution of a difficult problem, viz. that of adding new work to a church where the lower arcading of the nave is Norman, the triforium "Transitional"—except the last bay which is "Early English"—while the clerestory is a later specimen of "Early English."

The firm of Douglas and Minshall designed that splendid monument in the village of Hawarden, the Gladstone Memorial Library—in which is housed the great statesman's collection of books—with the hostel adjoining. This collegiate-like building was part of the National Memorial to the British statesman and was visited and praised by the late King Edward. The Golden Jubilee Porch at the front entrance to Hawarden Castle is the work of the firm, also the conical-roofed strong room (in which were stored Mr. Gladstone's mass of historic correspondence and documents until transferred

to the Memorial Library), the fine church of St. Matthew's, Buckley, while their latest work at Hawarden is a house for Miss Helen Gladstone, called "Sundial." The *Chester Chronicle*, when paying a high tribute to the deceased, said: "In the city of Chester, if Mr. Douglas's monument would be sought, one might truly say, 'Look around.' No man in modern times has done so much to add to the beauty of the old city's ancient streets and houses." From a strictly architectural standpoint it would be difficult to imagine a more picturesque treatment of business premises in an old city than the bank and shops in St. Werburgh Street, with their picturesque grouping, finely proportioned features, and delightful oak detail, making an effect at once attractive to the passer-by (be he layman or artist), and, while complete in themselves, gaining by their sympathy with the feeling of the Cathedral beyond and producing a street effect which any city might envy. Other work in Chester includes the Grosvenor Club and North and South Wales Bank in moulded brickwork, which reminds one of his Belgium studies, the County Constabulary, Grosvenor Park Baptist Chapel, and all the houses as far as the park gates, the Prudential Assurance Company's offices, and line of houses in Bath Street—a particularly happy instance of irregular grouping, which will be further enhanced by the mellowing influences of time and weather—and the terminal block to the Northgate Rows.

He designed Barrowmore Hall, a fine brick residence, for the late Mr. H. Lyle Smith, the very superior schools, picturesque bridge and many groups of cottages in the model village of Port Sunlight for Mr. W. H. Lever, also work at Mr. Lever's own house at Thornton Hough. At his native place, Sandiway, he owned considerable inherited property, and for the new church there, which he designed, he gave the site and defrayed the cost of the chancel. Lastly, we should like to mention the house which he designed for himself a few years ago, "Walmoor Hill," a beautiful castellated stone mansion on the banks of the River Dee at Chester, in which he realised some of his inner feeling towards the Art he loved and carried out with honesty, singleness of purpose, and faithfulness to an ideal.

Mr. Douglas began practice in Chester by himself. His first partner was Mr. D. P. Fordham, who died in 1899. His next partner was Mr. C. H. Minshull, who has shared the well-merited distinction of the firm's work for a number of years past, and who, in conjunction with Mr. E. J. Muspratt, will continue to carry on the business at Abbey Square, Chester.

To one who has known Mr. Douglas and his work for nearly thirty years, it may be permissible to say he was a true architect, a hero in his work, a cultured gentleman, counting no personal sacrifice, looking for no reward save the honour of his Art and the uplifting of his country.

G. A. HUMPHREYS [F.].

Llandudno, 20th June 1911.

THE PLAN OF THE FIRST CATHEDRAL CHURCH OF LINCOLN.

Appended is an abstract of a Paper on this subject read by Mr. John Bilson, F.S.A. [F.], before the Society of Antiquaries on the 25th May:—

The builder of the church was Bishop Remi, the almoner of Fécamp, who was the first of the Norman ecclesiastics to receive a bishopric in the conquered country. The historical evidence indicates that the church was begun about 1073, and it was finished (except the upper part of its west front) in 1092. It is evident that any exact knowledge of the architecture of the church must be the more valuable because it was one of the earliest churches built in England by the Norman conquerors, and because it was built quickly within these twenty years. The recovery of its plan is also important for another reason; the knowledge of what already existed must necessarily throw some light on the precise manner in which the present church was built, and so facilitate the solution of the difficult problems which still remain to be unravelled with regard to the history of the works of St. Hugh and his immediate successors.

Before the recent excavations, the only traces of Bishop Remi's church known with certainty were (with the exception of the very important original work at the west end) the fragments of the foundations of the choir and its great apse beneath the choir stalls, and the foundations of the north-west angle of the north transept found in 1903. The excavations kindly authorised by the Dean and Chapter, and carried out at their expense, were begun during the Lincoln meeting of the Royal Archaeological Institute in 1909, under the direction of Mr. W. H. St. John Hope; these resulted in the discovery of the foundations of the east end of the north choir aisle, and of the eastern bays of the wall of the north aisle of the nave. The excavations were continued, under Mr. Bilson's direction, in the earlier months of this year, in the north transept and its eastern aisle, and in the western bays of the nave. The foundations discovered, which were described in detail with the aid of a large-scale plan, have given sufficient fixed points to make it possible to reconstitute the plan of the whole northern half of the church.

The plan consisted of a choir of three bays, terminating eastward in an apse, and flanked by aisles which extended eastward as far as the springing of the great apse; a transept, each arm of which consisted of two bays, one of which was opposite the aisles of the choir and nave, and the other, beyond the north and south, had an eastern aisle of a single bay; a nave of ten bays in length, with north and south aisles; and two western towers at the ends of the aisles, with the nave extended an additional bay between them. These towers do not appear to have been carried up quite so high as the nave walls, but, below, this western work still remains for the most part, though it has undergone much subsequent alteration. The plan was a remarkably orderly and logical piece of work, and it is due to the fact that it so closely conformed to the Norman "type" that its main lines have been recovered with comparatively little excavation. The internal width of the main spars generally was 28 feet 9 inches; of the choir and aisles about 65 feet; and of the nave and aisles 66 feet 5 inches. The internal length of the transept was 122 feet 9 inches, and the total internal length, from the inside of the west wall, was about 310 feet.

The great apse of the choir was semi-circular, divided into five bays, and the plan of the whole eastern part shows marked analogies with the plans of St. Nicolas, Caen, Cerisy, Lessay, and Saint Georges de Boscherville. The choir was three bays in length, as at Montivilliers, instead of the more usual two. The aisles of the choir were finished square externally, and apsidal internally. It is probable that the choir was separated from the aisles by solid walls, as at Cerisy and St. Albans. The plan of the transept is particularly interesting, for it affords the earliest instance of an aisled transept in the Norman school. The transept aisle stopped short of the end of the transept itself. Each arm of the transept had the characteristically Norman gallery, which here, as at Jumièges and Bayeux, may have extended over the whole area up to the crossing piers on either side. The transept plan shows close analogy with that of Saint Etienne, Caen, and the similarities in small details here and in the nave are so marked as to suggest that Bishop Remi's master-of-the-works must have been employed on the Conqueror's church before he began his work at Lincoln. Some fragments of reused shafts which evidently belonged to the nave piers, and some details of setting-out, seem to indicate that the nave closely followed the type of Saint Etienne, Caen. The external width of the nave itself is indicated on the existing west front by the line of the southern jamb of the northern great lateral recess, and that of the northern jamb of the corresponding southern recess, and the heights of the smaller recesses at either end of this front indicate those of the nave arcades.

The plan of Bishop Remi's church, as worked out from the remains which have been found, is an admirable illustration of the logical precision, clearly defined expression of structure, and feeling for monumental form which characterises the best work of the Norman school. It conforms very closely to the "type" of the contemporary works of the Continental school of Normandy, much more closely than do most of the great churches built in England after the Norman Conquest. It shows some indications, though as yet but slight, of the great expansion of scale which is illustrated in the nearly contemporary church of Winchester. And its western work stands almost alone as a magnificently original piece of monumental building, a speaking witness of the powerful architectural expression of a masterful race.

In the discussion which followed the Paper, the President expressed the Society's appreciation of the action of the Dean and Chapter of Lincoln in allowing the excavations to be undertaken, and in so generously defraying the cost.

Messrs. J. & A. Churchill have in preparation a book of reference containing the names, appointments, and achievements of the world's foremost scientists. It will be called *Who's Who in Science*, and will appear annually, edited by Mr. H. H. Stephenson. Schedules are now being addressed to the scientists whose names may appear, and they are asked to assist the publication by filling in and returning the forms to 7 Great Marlborough Street, London, W., as soon as possible. For enabling scientists to communicate with each other all the world over, and for giving a rapid summary of the achievements and careers of great men, the new annual should soon prove itself indispensable.



9 CONDUIT STREET, LONDON, W., 30th June 1911.

CHRONICLE.

The Institute Coronation Address and Decorations.

Inset between pp. 592 and 593 of this issue is a photographic reproduction, to a reduced scale, of the Address to the King presented by the Royal Institute on the occasion of His Majesty's Coronation. The writing and illuminating in gold and colours were designed and executed by Mr. Graily Hewitt, assisted by Mr. L. Macdonald Gill, of Lincoln's Inn. The document is bound in a handsome case of Nigerian morocco leather, of a warm russet colour, bearing on its front, stamped in gold, the inscription "The Address of the Royal Institute of British Architects to His Majesty the King."

The Coronation decorations of the Institute premises were kindly designed by the Hon. Secretary of the Institute, Mr. Henry T. Hare. The upper stories were hung with red velvet-brocaded cloth intertwined with swags of laurel; the lower with blue velveteen, and cloth-of-gold bearing the letters "G.V.R." embroidered in blue velvet. Swags of laurel swung across the building from window to window, and surmounting all was a large jewelled crown in bold relief. The seal of the Institute and gilt rosettes repeated at intervals were utilised in the composition of the scheme.

Coronation Honours for Members of the Institute.

The President, at the General Meeting last Monday, took advantage of the occasion to offer the congratulations of the Institute to two of its Royal Gold Medallists, both members of the Institute, who within the last few days had received the distinction of knighthood at the hands of His Majesty. He referred to Sir Ernest George, A.R.A., who received the Royal Medal in 1896, and Sir Arthur John Evans, D.Litt., F.R.S., its recipient in 1909. The former, remarked the President, was a very old friend of theirs who had only recently vacated the Presidential Chair, and he was sure they would all wish him many long and happy years in which to enjoy the honour which had been conferred upon him. Sir Arthur Evans, their Honorary Associate, was perhaps not so well

known to them personally, but the work he had done was, and was very greatly appreciated by them all; he was sure Dr. Evans would receive their warmest congratulations upon the distinction which had been accorded him.

The cordial congratulations of the Institute will also be extended to two other members of the Institute who have received Coronation honours, viz. Sir Henry Tanner, I.S.O. [F.], upon whom has been conferred a Companionship of the Bath, and Mr. W. H. Lever, recently elected Hon. Associate, who has been created a Baronet.

ST. PAUL'S BRIDGE.

The following letter from the President appeared in *The Times* of the 20th June:

9 Conduit Street, Hanover Square, W., 19th June.

SIR,—The news of the re-committal of the St. Paul's Bridge Bill by the House of Commons has been received with the utmost satisfaction by those who care for the beauty and dignity of London, and the Royal Institute of British Architects, which felt it to be its duty to take public action by pressing for the reconsideration of the Corporation's proposals, has to acknowledge with the warmest gratitude the powerful and consistent support which its attitude has received from *The Times* and from the Press generally.

In the debate of the House of Commons reported in your issue of June 15, some surprise was expressed by members that the Royal Institute of British Architects was not represented before the Committee. The Institute was advised that it would be useless to appear except by counsel, the cost of which was estimated at several hundred pounds. The Council of the Royal Institute did not feel justified in incurring such an expenditure.

I am, Sir, yours truly,

LEONARD STOKES, President R.I.B.A.

Some Suggested Modifications of the Corporation's Scheme.

In the last number of the JOURNAL mention was made of an alternative scheme for the proposed St. Paul's Bridge prepared by Mr. W. Henry White [F.], of which some particulars had appeared in *The Times* of the 13th June. Mr. White has kindly sent the plans for publication, together with the following explanatory notes:—

PLAN "A."

The reason for a new bridge over the Thames being essentially a consequence of the great increase in traffic, it follows as a matter of course that its approaches from both banks of the river should be in the best positions for linking up the existing main arteries at such points as will best facilitate and prevent the congestion of the said traffic.

A reference to the plan prepared by the Bridge House Estates Committee will show that these considerations have on the whole been well studied so far as the position of the proposed bridge and the new thoroughfare

on the Surrey side of the river leading to the existing centre at the junction of Great Guildford Street and Southwark Street is concerned. On the Middlesex side, however, the new main artery proposed by the Committee seems to have been laid out with a too utilitarian motive, and the Committee appear to have been largely influenced, if not entirely so, by the question of cost; and by so doing, if their scheme is sanctioned by Parliament and carried into execution, this economical effort will be found in practice to have largely frustrated the very object of its *raison d'être*, as the traffic would debouch into the south-east corner of the Churchyard and there meet the double flowing stream of traffic through the Churchyard from east to west and west to east. And as this position also receives the northern-going traffic further congestion is bound to result.

Future generations might well have cause to complain of our want of foresight if, when such a great undertaking is being considered, the mistake is made, owing to a false idea of economy, of not securing the very best improvement.

The suggestion made on this plan shows that while practically maintaining the Committee's scheme from Queen Victoria Street southwards, modifications of the northern portion on the lines herein suggested would provide for present and future needs and improvements as time and opportunity permitted.

It will be noted on examining the plan that, if the whole scheme could be carried out, the facilities for coping with the traffic would be vastly improved, as the eastward and westward going streams would be diverted into their proper channels, thus avoiding the congestion which would be the natural result of the carrying out of the Committee's scheme.

The opportunity thus presented for opening up a vista to the south front of St. Paul's as the natural and logical development of this scheme should be also apparent, and is so obviously desirable in the best interests of the City that, if not in the immediate future, it would be insisted upon by the public when the construction of the new road has been accomplished.

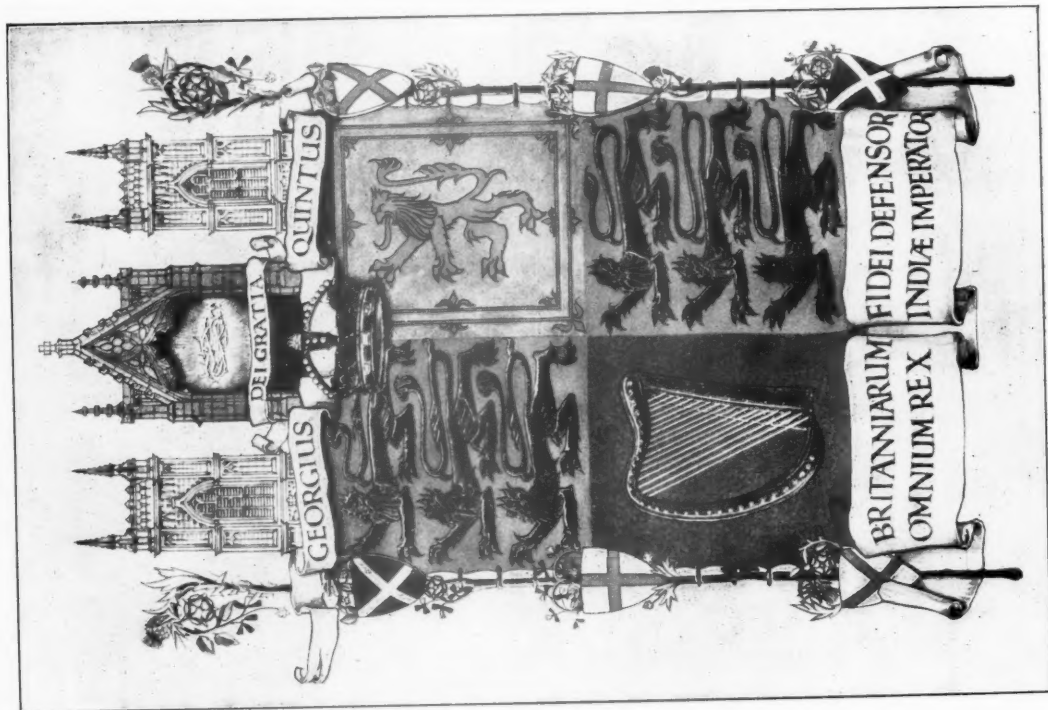
It will be seen, moreover, that if the cost of carrying out the complete scheme is prohibitive for the time being, if this suggestion were adopted the new road proposed by the Committee, only slightly modified as herein indicated, would not materially add to the cost of the Committee's scheme, and the vista to St. Paul's, the widening of the Churchyard on the south, and the formation of a western arm of the proposed new road could be left for future development.

The embryonic idea contained in this plan is made with the full knowledge that in its details much further thought and consideration would be necessary, but it is hoped that the Committee will at least give it some attention before it is too late.

PLAN "B."

If the scheme shown upon Plan "A," is considered to affect too large an area of property, Plan "B" shows a modification by which, whilst adopting the Y-shaped road as the main principle on account of the traffic requirements, and bringing the Corporation's road by means of an easy curve slightly further westward than shown upon Plan "A," it will be seen that a fine open space or "Place" would be formed immediately opposite the south porch of St. Paul's, thus opening up a wide vista of the Cathedral, which would be more effective than could be obtained by means of a straight road joining the Churchyard at right angles.





he humble & loyal
Address of the Royal
Institute of British
Architects to His most
excellent Majesty the King

May it please your Majesty—
We your dutiful subjects
the President and Council,
on behalf of the Royal Insti-
tute of British Architects
and of the Architectural
Societies both in the United
Kingdom and in the British
Dominions beyond the Seas
in alliance therewith, of

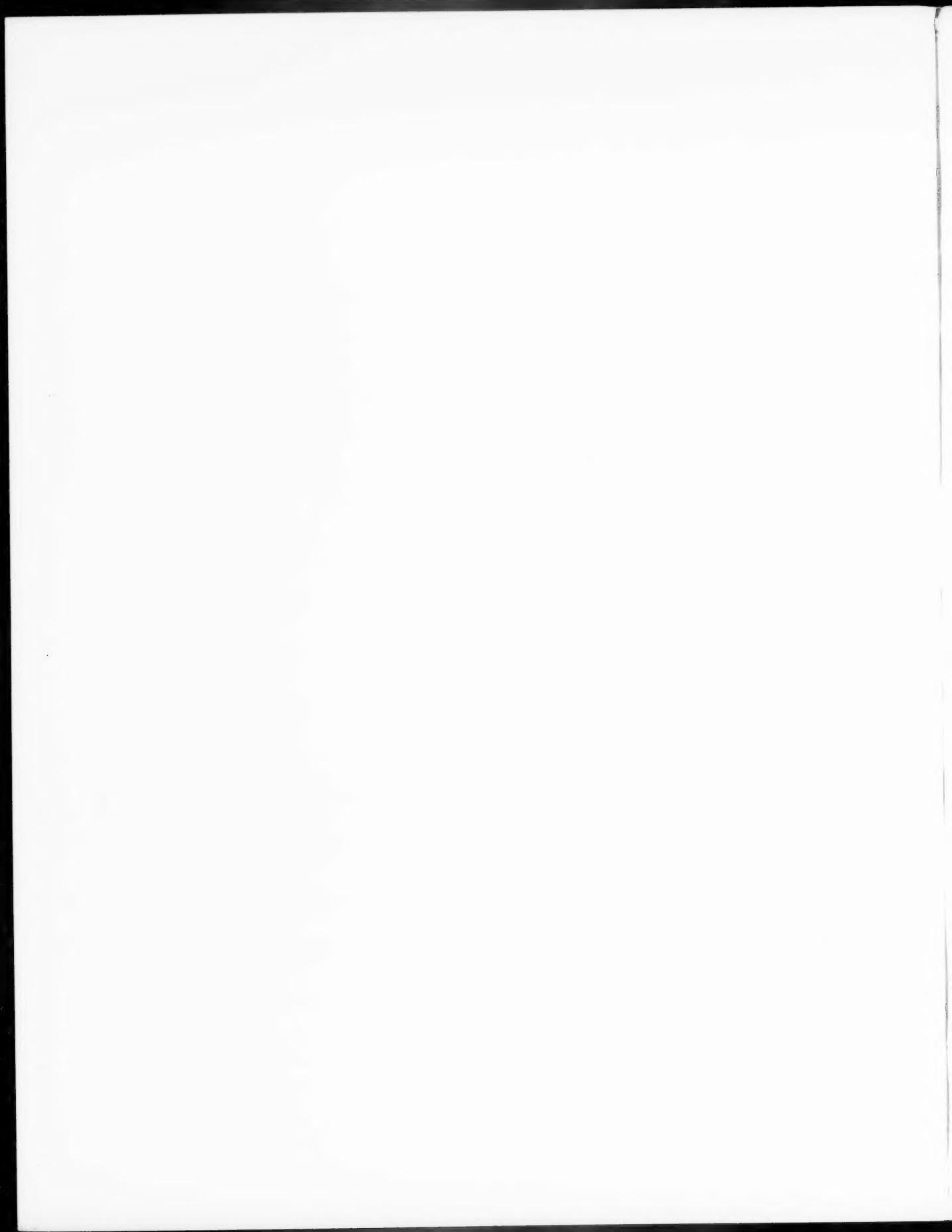
which Royal Institute your Majesty is the gracious and generous Patron, beg leave humbly and respectfully to approach your Majesty with the expression of our loyal congratulations on the occasion of your Majesty's Coronation, and to tender our most devoted and dutiful homage. We earnestly pray that Almighty God will grant your Majesty a long peaceful, and glorious reign over your Empire, wherein the Arts may flourish, Sei-

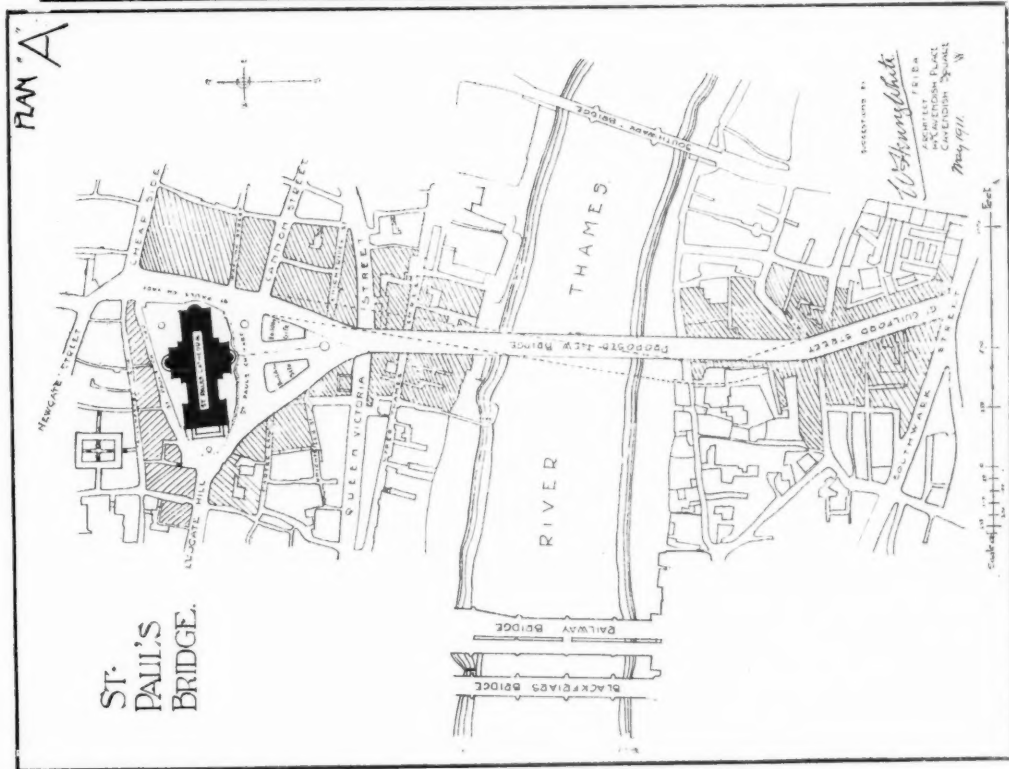
ence extend her dominions, and the blessings of civilization be showered upon a loving and loyal people.
Given under our hands & seal this Tenth Day of April...
One thousand nine hundred and eleven.

[Here are subscribed the signatures of the President, Vice-Presidents, Hon. Secretary, and Secretary, with the Institute seal at foot, and on following pages the signatures of members of the various sections of the Council.]

EXPLANATION.—On the top left-hand page is displayed the Royal Standard. Before it the Imperial Crown is poised, ready for His Head, whose title and authority are declared upon the scrolls about it. Above rise the towers of Westminster Abbey, England's witness, supporting a golden shrine, within which hovers, for symbol of the Source of all sovereignty, as also its burden, the Crown of Thorns. The Standard is borne upon two shepherd's crooks, betokening the people's immemorial need, and budded with the National Emblems, the flowers growing from the staves, each upon a brother's stalk, every two twining heart-wise behind the shield of the third's Saint and Patron—in mutual service, reliance, and affection.

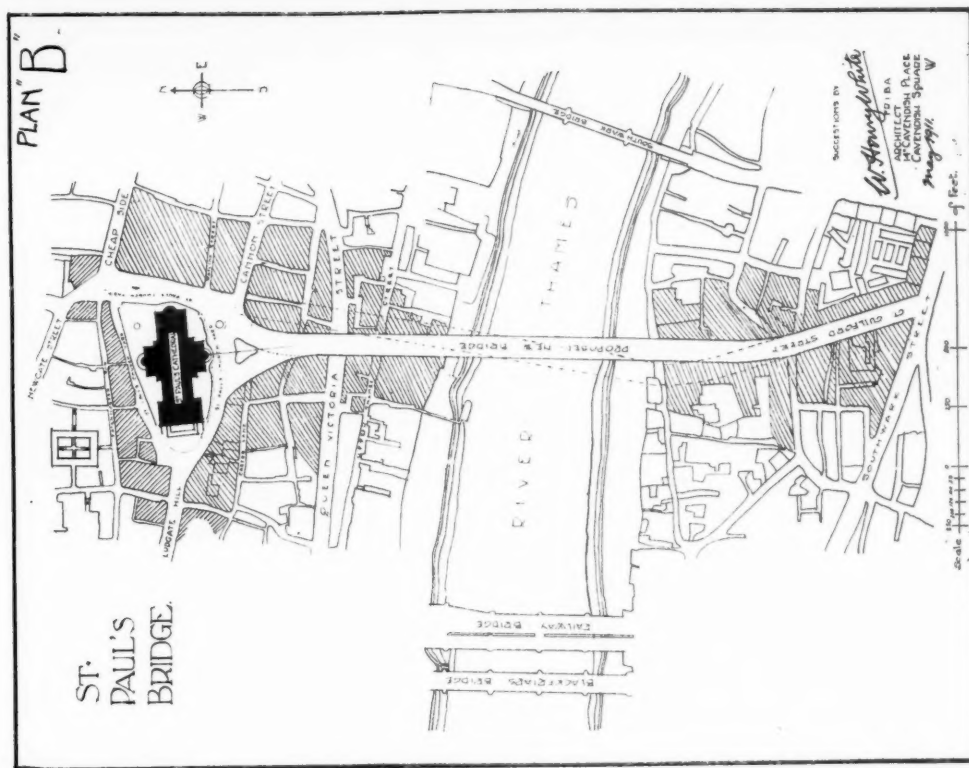
GOD SAVE THE KING.





ST. PAUL'S BRIDGE: SUGGESTIONS BY MR. W. HENRY WHITE [F.]

The dotted lines on the plans indicate the new road as proposed by the Bridge House Estates Committee.



Plan "B" also admits of the scheme being developed in sections, adopting as closely as possible the Corporation's road as a commencement of the improvement and leaving the remainder for future development as opportunity or the necessities of traffic demand, and, being a lesser interference with the surrounding properties, it would of course be less costly than Plan "A."

The Times of June 22nd published the following :
From Professor BERESFORD PITE [F.],—

The Next Step.

The Corporation of London having loyally accepted the instruction of the House of Commons to submit a scheme for the new bridge and its approaches which in architectural design is best adapted to the character of the site, I venture to point out the great debt of gratitude that is owing to Mr. Philip Morrell for embodying in this instruction the sometimes forgotten truth that architectural art is more than the designing of beautiful fronts or interiors to buildings, and comprehends the arrangement of the buildings themselves, both to one another and to their situation and spacing.

Wren's greatest work was the town planning of London with a Cathedral at its heart : but, despite Mr. Samuel Pepys or Mr. John Evelyn's presence, in the absence of Mr. John Burns, to see this town planning scheme through the Local Government Board, it was blocked and defeated. This greater task of the town planning of St. Paul's has now become the duty of the Corporation by the instruction of Parliament. It may be wonderful, but it is so. With this delightful responsibility has come the additional possibility, denied even to Wren's dreams, of the magnificence of approach attainable by a grand causeway across the river.

The problem is one of great magnitude and will require ample time for development and discussion, though meanwhile steps may be taken to carry out the design and rebuilding of Southwark Bridge, and allow for the liberation of the Bridge House Estate funds for a somewhat larger expenditure.

But as the City have shown no lack either of financial resource or of a drastic courage in the preparation of their first plan, we may expect a handsome solution of their present task. The rejected scheme proposed to purchase and eliminate practically the whole of the eastern side of St. Paul's Churchyard, and, with a traffic courage much to be wondered at, introduced a new stream of north and south traffic upon the top of Cheapside. We may therefore have confidence that a considered largeness of view will not be wanting now in redesigning the surroundings of St. Paul's, and in preparing for a dignified "lay-out" of the Churchyard buildings, as well as in bringing the Dome into architectural relation with the approach from the bridge. I venture the suggestion that, owing to the general importance of the subject and the many interests involved, as much guidance as practicable may be offered by the Corporation to Parliament upon two as yet unsettled parts of the problem. First, as to the architectural character of the new bridge itself (a necessary corollary of the instruction). The design of the bridge should now be defined, as decision must be made sooner or later whether it is to be of stone like the Cathedral, or London and Waterloo Bridges, or of metal like those at Southwark and Charing Cross. Secondly, whether or not the tramway upon the bridge is sufficiently provided for as to width and has been fully planned and worked out. At present this also is not in the Bill.

The subject is one of absorbing public interest, and though I am not in a position to add a word on behalf of the Royal Institute of British Architects, I may express the conviction that if requested by the Corporation the Council of the Institute would at once nominate an honorary commission of architects to confer with them upon this matter of national importance.

The public spirit shown by such a distinguished architect as Mr. Norman Shaw in placing his services freely at the disposal of the County Council or the Government on more than one occasion is a precedent that many of his colleagues would feel it an honour to follow. It may not be inappropriate to add that Michael Angelo completed St. Peter's, declining all proffered remuneration, and that Christopher Wren was deprived of any salary or pay long before he saw the completion of his incomparable masterpiece.

From Mr. EDWIN T. HALL [F.],—

Architects and the Committee.

In the debate in the House several members suggested that the expense to the Royal Institute of opposing a Bill was a bagatelle, and also spoke of its *locus standi*.

Leaving the St. Paul's controversy entirely out of the question, the following facts may be of interest :—

In 1909 the Royal Institute petitioned against a Bill and appeared before a private Committee of the Commons.

Their costs amounted to over £500, notwithstanding the fact that I (as the then senior Vice-President) and my colleagues, who conducted the opposition and gave evidence on behalf of the Institute, gave our services gratuitously—services which occupied us for weeks.

In 1905 the Institute also opposed a Bill, and their costs under similar conditions came to nearly £800.

On that occasion the Institute representatives spent many weeks of gratuitous service in the interest of the public.

On the question of the *locus standi* of the Institute, this has long been recognised by Parliament, not on the narrow and technical ground governing ordinary opponents—namely, that they shall have some personal interest in the scheme before Parliament—but on the much higher ground that the Royal Institute have no interest whatever to serve excepting that of placing their technical knowledge and experience at the service of the public.

I had the honour of representing the Institute before a Committee of the House in 1890, and since that date the Institute have, on several occasions, petitioned on behalf of and been heard in the interest of the public in respect of Bills appertaining to architecture and building.

In every case the representatives of the Institute appeared before Parliament and gave their services gratuitously.

The advantage to the community of having at its disposal the technical advice and experience of a body of experts is admitted on all hands, and it has been the practice of the Government Departments, as well as of many municipal bodies, to avail themselves of this advice and experience ; but the public would hardly expect that, in addition to giving these services for nothing, architects in their corporate capacity should regularly contribute large sums of money to the same public interests.

Second Report of the Joint Committee on Reinforced Concrete.

The Joint Committee on Reinforced Concrete have now completed their Second Report, and it will be on sale at the Institute in the course of a few days.

In an introductory note the Committee state that since the issue of the First Report in 1907 the use and knowledge of Reinforced Concrete for Architectural and Engineering Constructions have steadily increased. It therefore appeared desirable that it should be reconsidered in the light of further experience, and this Second Report is the result of the Committee's labours. The section on Materials has been modified in certain details. The section on Methods of Calculation has been recast in form, and the standard notation (proposed by the International Association for Testing Materials and modified by the Concrete Institute) has been adopted. The sub-section on Columns has been revised and the formulæ proposed have been recast, so as to include the cases in which the lateral or helical binding is a material factor in the strength. The suggestions which have been made from time to time by institutions and individuals have been of much value and have been fully considered.

Professor Unwin, F.R.S., Captain J. Gibson Fleming, R.E., and Messrs. Wm. Dunn and E. Fiander Etchells contribute Appendices. The size of page has been reduced for convenience of handling, and the work will be issued in stiff covers at the price of One Shilling.

Existing Portraits of Inigo Jones.

Mr. Herbert Batsford writes: "In reply to Mr. Humphreys' inquiry in a recent number of the JOURNAL, as to existing portraits of Inigo Jones, he should refer to the engraved portraits of Inigo Jones in the Print Room at the British Museum, where they are collected together, and they include some at various dates of Inigo Jones' life, and an extraordinary one the accuracy of which is doubted. I think that every known portrait has been engraved; of course the chief one is by Van Dyck. Certain information as to the actual paintings of portraits can be found in the Architectural Publication Society's Dictionary under the article 'Inigo Jones.' I believe that Van Dyck's original painting appears in the Barber-Surgeon's Wardroom."

Mr. R. F. CHISHOLM, F.S.A. [F.] has been awarded the Silver Medal of the Society of Arts for his Paper on "The Taj Mahal" read before the Society during the past session.

M. AUGUSTIN REY, A.D.G., of Paris, widely known for his valuable contributions to the transactions of international congresses on hygienic, æsthetic, and sociological subjects, is highly esteemed by his French *confrères* for his architectural achievements, and has just been awarded the "Grande Médaille de l'Architecture privée," a much prized distinction annually granted by the Société Centrale des Architectes Français.

Relics of a Great Temple.

Last winter the British School of Archaeology in Egypt was engaged on several sites within fifty miles south of Cairo. The most successful of these excavations was that at Hawara, a site first excavated by Professor Flinders Petrie in 1888, to which he now returned accompanied by Mr. Stopford and Mr. Hayter. The following is cut from a long account of the finds which appeared in *The Times* a few days ago:—

The great site of the Labyrinth again claimed attention. Though much of it had been searched before, the rubbish heaps running up to 24 feet high along the side of the pyramid had never been turned over. There—if anywhere—some remains of the greatest temple of Egypt might yet lie buried. These hopes were not disappointed; a colossal shrine of red granite with two life-size figures of King Amenemhat III. was uncovered; near it were half of another such shrine and parts of a third. Each of the chapels, or small temples, belonging to the nomes of Egypt appears to have had a granite shrine; and though the walls and even the pavements of the buildings have been removed, yet the distances of these immense blocks of about eight tons' weight serve to show the spacing of the buildings.

The sculptured figures of the gods carved in the hardest white limestone lay near these. Three busts of the crocodile god Sebek, one bust of Hathor, a half-length figure of an unknown goddess with palm branches on her head, and parts of a great group 7 feet wide, representing the king seated, with four lake goddesses holding fishes, were found. Unhappily, all the faces of the statues had been broken off. This mutilation was done in early times; and the statues had continued standing in the temple for ages in this disfigured state, as we learn by the remains of the bats upon the palm goddess. These are the oldest historic statues of the gods that are yet known, dating doubtless from the time of Amenemhat III., 3400 B.C., as his name was repeatedly found here on fragments of sculpture, and no trace of later work was to be seen. Scraps of the coloured reliefs of the temple were frequent; the most interesting is a figure of the king kneeling on a sacred boat, and opening the door of a shrine containing a sacred tree. Many pieces of small fluted columns were found, painted red and black, apparently parts of small shrines three or four feet high. A curious trace of the latest attention to the temple was recovered on a weathered block of red granite, which lies on the other side of the pyramid, but could only have come from the temple. After searching it carefully in slanting sunshine the name of a "Queen Cleopatra" was traced; this proves that an added inscription was put up over some doorway as late as between 180 and 30 B.C. The beginning of the destruction of the temple must have been soon after that, as Pliny states that it was "marvellously ravaged."

Perhaps the most attractive results are those from the late cemetery, containing the mummies with painted wax portraits of the Roman age. Twenty-three years ago Professor Petrie worked over part of this cemetery, finding the eleven portraits now in the National Gallery and many others which are scattered in various museums. The surface accumulations had been partly removed since then, and more ground could be searched. Sir Gaston Maspero proposed that the British School should finish the site; and the result is that some thirty portraits in fair state have been found, about half as

many damaged examples, and a couple of dozen hopelessly decayed.

Among the portraits are some which artistically are finer than those already in London. A few names were marked on the mummies; one powerful old lady is named "Demetris, aged 89"; another portrait with a thoughtful and refined expression is named "Hermione Grammatike," a woman teacher of the classics, the oldest remains of any woman professor yet known. It is hoped that she may find rest as the patron genius of one of the women's colleges. A head painted in dry colour-wash on a stucco ground laid upon canvas shows an entirely different kind of work, probably more akin to the earlier Greek school of painting. One mummy had three portraits upon it; the body, duly wrapped up in decorative bandages with a portrait, had been adopted for another person by the unscrupulous undertaker; he took off the portrait (*a*), split up the cedar panel, thrust it under the wrappings, and then re-bandaged the mummy with new wrapping, took a disused portrait (*b*), turned it face down, and proceeded to paint on the back of the panel a head (*c*) for the person whose body was sent to be embalmed.

ALLIED SOCIETIES.

The Cape Institute of Architects.—A Meeting was held on the 18th May in the Board-room of the South African Association at Cape Town to consider the advisability of forming a Town Planning and Municipal Improvements Society on the lines laid down by the Town Planning Conference recently held in London, and, if necessary, to appoint a committee which should go into the whole question. Mr. Arthur H. Reid [*F.*], President of the Cape Institute of Architects, was in the Chair, and there were present representatives of the Publicity Association, the National Society, the Society of Artists, and other public bodies.

Mr. Reid, addressing the Meeting, said that it afforded him and the Council much satisfaction to meet the members, because he knew that without their interest and encouragement they would be wasting time in organising any movement for a Town Planning Conference. The science of town planning was essentially an architectural problem, and should take precedence of such engineering features as water supply, sewers, roads, tramways, and artificial light. The first thing to be done, in planning a city, was to secure a *motif*, and then determine the general lines upon which the city and its suburbs should be encouraged to develop. Co-operation with the town engineer was necessary in connection with the making of roads, distribution of water, electric light, &c., but there should not be a surrender to utilitarian requirements to the disregard of architectural and scenic effect. The public on their part must recognise that the future of the city and suburbs did not depend upon the collective efforts of popularly elected bodies alone, but upon the selection of the right men to fill the seats of these assemblies. He urged the appointment of an official to supervise building plans, believing that a one-man control, subject to the authority of a central administration, would be the best arrangement, for art was produced by individuals and not by committees or corporations.

In the course of the discussion which followed Mr. R. R. Brydone said that it would be advisable for the various societies represented to co-operate with the Publicity Association rather than to form a separate

little body, which would be too weak to do any real good. They should take the example of America, where every town of any importance had a society which looked after municipal improvements and did the work here undertaken by the Publicity Association.

Dr. Bennie Hewat heartily welcomed the movement and thought the time chosen for its inauguration opportune. Cape Town's future depended to a large extent upon its architectural beauties, and they should strive to make their city as attractive as possible to the pleasure-seeker.

A motion was carried that the Meeting express its thanks to the Institute of Architects for bringing this matter forward, and the Institute was invited to co-operate with the Publicity Association in its efforts to add to the attractions of the Peninsula.

MINUTES. XVI.

At the Sixteenth General Meeting (Ordinary), held Monday, 26th June 1911, at 8.30 p.m.—Mr. Leonard Stokes, *President*, in the Chair; entered in the attendance-book the names of 32 Fellows (including 14 members of the Council), 38 Associates (including 3 members of the Council), 9 Licentiates, 1 Hon. Fellow, 2 Hon. Associates, and numerous visitors—the Minutes of the Meeting held 12th June were taken as read and signed as correct.

The following Members and Licentiates attending for the first time since their election were formally admitted by the President—viz.: John Alan Slater, Joseph Horace Lyncham Wheatley, Benjamin Charles Ernest Bayley, Basil Oliver, Bernard Frank Matthews, *Associates*; Hugh Stewart, Arthur Cyril Caudwell, Walter West Mabson, and Miss Florence Fulton Hobson, *Licentiates*.

The Secretary announced the nomination for Licentiate-ship of the 81 candidates whose names were published in the *Supplement* to the JOURNAL of the 27th May.

The President announced that Dr. Wilhelm Dörpfeld, who was to have been present to receive the Royal Gold Medal for Architecture, was prevented by illness from attending, and that, by request of the German Ambassador, Count William Bentinck, *Attaché* to the German Embassy, would receive the medal on behalf of Dr. Dörpfeld.

The Secretary read a letter from Dr. Dörpfeld expressing his regret at not being able to be present, and tendering his thanks to the Institute for the honour they were conferring upon him.

Professor Beresford Pite [*F.*] having delivered an address on Dr. Dörpfeld's life and work, the President briefly addressed Count William Bentinck and handed him the Royal Medal for transmission to Dr. Dörpfeld.

Mr. Lawrence Weaver, F.S.A. [*Hon. A.*], having read a Paper on THE INTERLEAVED HEIRLOOM COPY OF WREN'S "PARENTALIA," and showed a number of lantern slides in illustration thereof, formally presented to the Institute the volume in question, which, through the efforts of Mr. Weaver, had been purchased by subscription from the last surviving direct descendant of Sir Christopher Wren.

The President having accepted the volume on behalf of the Institute, a vote of thanks to Mr. Weaver, moved by Mr. H. H. Statham [*F.*] and seconded by Mr. Paul Waterhouse [*F.*], was carried by acclamation.

The President announced that the Council had decided to extend the present Session until the 31st October.

The proceedings closed, and the Meeting separated at 9.40 p.m.

